

# DJ-X3

## Service Manual

### CONTENTS

#### SPECIFICATIONS

- 1) GENERAL ..... 2
- 2) RECEIVER ..... 2

#### CIRCUIT DESCRIPTION

- 1) Receiver ..... 3~6
- 2) M38224M6M(E:XA0862, T:XA0836) ..... 7
- 3) Terminal function of CPU ..... 8

#### SEMICONDUCTOR DATA

- 1) uPD3140GS-E1 (XA0312) ..... 9
- 2) TC4W53FU (XA0348) ..... 10
- 3) NJM2904V (XA0573) ..... 10
- 4) CXA1622M/P (XA0787) ..... 10
- 5) MB88347LPFV-G-BND-EF (XA0599) ..... 11
- 6) TK11816M (XA0665) ..... 12
- 7) TK10931V (XA0666) ..... 12
- 8) TA4101FTE12L (XA0667) ..... 13
- 9) S-80828ALNP-EAR-T2 (XA0834) ..... 13
- 10) BR24C64F-E2 (XA0669) ..... 14
- 11) S-81230SG-QB-X (XA0833) ..... 14
- 12) uPC2757T-E3 (XA0743) ..... 15

- 13) TC7SET08FU (XA0586) ..... 15
- 14) LA3335M (XA0786) ..... 16
- 15) NJM2107 (XA0850) ..... 17
- 16) Transistor, Diode and LED Outline Drawings ..... 17
- 17) LCD Connection ..... 18

#### EXPLODED VIEW

- 1) Front View ..... 19
- 2) Bottom View ..... 20

#### PARTS LIST

- MAIN Unit ..... 21~26
- SW Unit ..... 26
- Mechanical Parts ..... 26
- Packing ..... 26

#### ADJUSTMENT

- 1) How to enter the adjustment mode ..... 27
- 2) Adjustment ..... 27~29

#### PC BOARD VIEW ..... 30~31

#### SCHEMATIC DIAGRAM ..... 32

#### BLOCK DIAGRAM ..... 33

# SPECIFICATIONS

## 1) GENERAL

|                     |  |
|---------------------|--|
| Receiving range     | E : 0.1 ~ 1299.995 MHz<br>T : 0.1 ~ 823.995 MHz<br>850.000 ~ 868.995 MHz<br>895.000 ~ 1299.995 MHz |
| Modulation mode     | FM, WFM, AM  |
| Ant. impedance      | 50Ω  |
| Ant. terminal       | SMA  |
| Supply voltage      | DC 3.6V ~ 6V (Internal battery)<br>DC 4.5V ~ 16V (external regulated source)                       |
| Ground              | Negative ground  |
| Current consumption | reception : approx.75mA<br>Battery save (1:4)approx.39mA   |
| Temperature range   | -10 ~ +60°C (+14 ~ +140 F°)  |
| Frequency stability | ±5ppm(-10 ~ +60°C)(+14 ~ +140F°)   |
| Dimension           | 56(W) × 102(H) × 23(D)mm   |
| Weight              | Approx.145g  |

## 2) RECEIVER

|                    |  |
|--------------------|--|
| System             | Triple-conversion superheterodyne  |
| First IF           | 248.45 MHz   |
| Second IF          | 38.85 MHz  |
| Third IF           | 450 kHz  |
| Selectivity        | AM/FM -6dB/12kHz or over , -60dB/30kHz or less<br>WFM -6dB/150kHz or over  |
| Sensitivity        | FM/WFM 12dB SINAD, AM 10dB S/N   |
| Typ.               | AM : 0.5 ~ 1.62MHz 17dBu 10dB S/N<br>1.625MHz or over 5dBu 10dB S/N<br>FM : 30 ~ 550MHz -3dBu 12dB SINAD<br>550MHz or over 0dBu 12dB SINAD<br>WFM : 76 ~ 770MHz 13dBu 12dB SINAD |
| Audio output power | more than 220mW (8Ω)   |

# CIRCUIT DESCRIPTION

## 1) Receiver

### 1. RX Method: Triple Super Heterodyne Method

1st IF. : 248.45MHz  
2nd IF. : 38.85MHz  
3rd IF. : 450KHz

### 2. Front End

0.1 ~ 29.995MHz

The signal input from antenna is switched at band switch D19, passing through the low pass filter, it is amplified at RF amplifier Q15. Then the signal is added to the 1st mixer IC3 through the band switch D17.

30 ~ 136.995MHz

The signal input from antenna is switched at band switch D23, passing through the band pass filter, it is amplified at RF amplifier Q21. Then the signal is added to the 1st mixer IC3 through the band switch D22.

137 ~ 222.995MHz

The signal input from antenna is switched at band switch D27, passing through the band pass filter, it is amplified at RF amplifier Q23. Then the signal is added to the 1st mixer IC3 through the band switch D26.

223 ~ 367.995MHz

The signal input from antenna is switched at band switch D29, passing through the band pass filter, it is amplified at RF amplifier Q27. Then the signal is added to the 1st mixer IC3 through the band switch D28.

368 ~ 469.995MHz

The signal input from antenna is switched at band switch D32, passing through the band pass filter, it is amplified at RF amplifier Q32. Then the signal is added to the 1st mixer IC3 through the band switch D31.

470 ~ 129.995 MHz

The signal input from antenna is switched at band switch D37 and D45, passing through the band pass filter, it is amplified at RF amplifier Q38. Then the signal is added to the 1st mixer IC3 through the band switch D36.

### 3. Mixer

The 1st Mixer

The input signal and the 1st local signal is added or subtracted at mixer IC3, and SAW filter FL1 selects the signal of 248.45 MHz, then eliminates the adjacent signal.

## The 2nd Mixer

The input signal and the 2nd local signal is added or subtracted at mixer IC4, and switched to FM/AM receiving side or WFM receiving side at D24 or D25 .

### FM/AM

At FM/AM receiving side, the crystal filter XF1 selects the signal of 38.85 MHz. The signal is amplified at the 1st IF amplifier Q22 after the adjacent signal is eliminated.

### WFM

At WFM receiving side, the band pass filter selects the signal of 38.85 MHz. The signal is amplified at the 1st IF amplifier Q22 after the adjacent signal is eliminated.

## 4. IF

### FM/AM

The amplified signal at the 1st IF amplifier Q22 is supplied to pin 24 of IC6 for demodulation. The signal of 12.8 MHz from the IC 1 reference buffer output is multiplied by 3 at Q17, then mixed with the signal added to pin 1 of IC6 in the mixer circuit inside IC6 to be converted into the 2nd IF signal of 450 kHz. The converted 2nd IF signal is output from pin 3 of IC6.

### FM

The output signal from pin 3 of IC6 is input to pin 7 of IC6 after the adjacent signal is eliminated at the ceramic filter FL2. The 2nd IF signal input to pin 7 of IC6 is demodulated at the limiter amplifier and quadrature detection circuit inside IC. Then the signal is output from pin 12 of IC6 as an AF signal.

### AM

The output signal from pin 3 of IC6 is input to pin 5 of IC6 after the adjacent signal is eliminated at the ceramic filter FL2. The 2nd IF signal input to pin 5 of IC6 is output from pin 13 of IC6 as an AF signal after AM is detected inside IC. Also reverse AGC is added to the 1st IF amplifier Q22 by AGC amplifier Q25 and the gain is controlled to get the normal audio output even though the input signal is fluctuated.

### WFM

The output signal from pin 3 of IC6 is input to pin 7 of IC6. The 2nd IF signal input to pin 7 of IC6 is demodulated at the limiter amplifier and quadrature detection circuit inside IC, and output from pin 12 of IC6 as an AF signal.

## 5. Squelch

The AF signal is output from pin 12 of IC6 and input to pin 19 of IC6. The input signal is output from pin 21 of IC6 through the noise filter amplifier and rectifying circuit. The rectified signal is supplied to the A/D port of microcomputer IC1. Then the microcomputer IC1 judges the signal to control ON/OFF of audio output.

## 6. Audio

### FM/AM/WFM

The audio output signal for receiving FM/WFM and AM is switched at IC9. The output audio signal is input to pin 1 of IC13 of stereo multiplex demodulator through AF amplifier IC17. When the input audio signal doesn't have a pilot signal, each audio signal is output from pin 9 and pin 10 to pin 1 and pin 16 of the audio amplifier IC14 equipped with the electronic volume. After the volume is adjusted, the signal is output from pin 7 and pin 10 to drive the speaker, etc. When the input signal has a pilot signal, each audio signal is output; L side signal is output from pin 9, and R side signal is output from pin 10.

Then the signals are input to the audio amplifier IC 14 equipped with electronic volume; L side signal is input to pin 1 and R side signal is input to pin 16. After adjusting the volume the signals are output; the L side from pin 7 and the R side from pin 10 to drive the speaker, etc.

## 7. VCO

### The 1st Local

VCO for the 1st local consists of the Colpitts oscillator. D15, D16 and L4 determine the frequency, and the signal is oscillated at the transistor Q9. The oscillated signal is supplied to pin 2 of PLL-IC1 passing through the buffer amplifier Q11 and Q10.

### The 2nd Local

VCO for the 2nd local consists of the Colpitts oscillator. D20, D21 and L15 determine the frequency, and the signal is oscillated at the transistor Q19. The oscillated signal is supplied to pin 19 of PLL-IC1 passing through the buffer amplifier Q20.

## 8. PLL

PLL-IC1 is used to control the oscillating frequency of VCO. IC1 is controlled by the serial control signal sent from the microprocessor IC7. The reference frequency of 12.8 MHz is generated by oscillating the crystal oscillator X1 inside the circuit.

### The 1st Local

IC1 compares the frequency gained by dividing the signal added to pin 2 of IC1 by the control signal from IC7 with the frequency gained by dividing the reference frequency of 12.8 MHz inside IC1. When the phase difference is found as a result of phase comparison, the pulse signal is output from the charge pump output of pin 8 of IC1, then the signal is converted into the DC voltage at the active filter Q13 and Q14 and added to the cathode side of VCO

vari-cap D15 and D16 to make the phases equal. In result the stabilized oscillation can be done at the desired frequency.

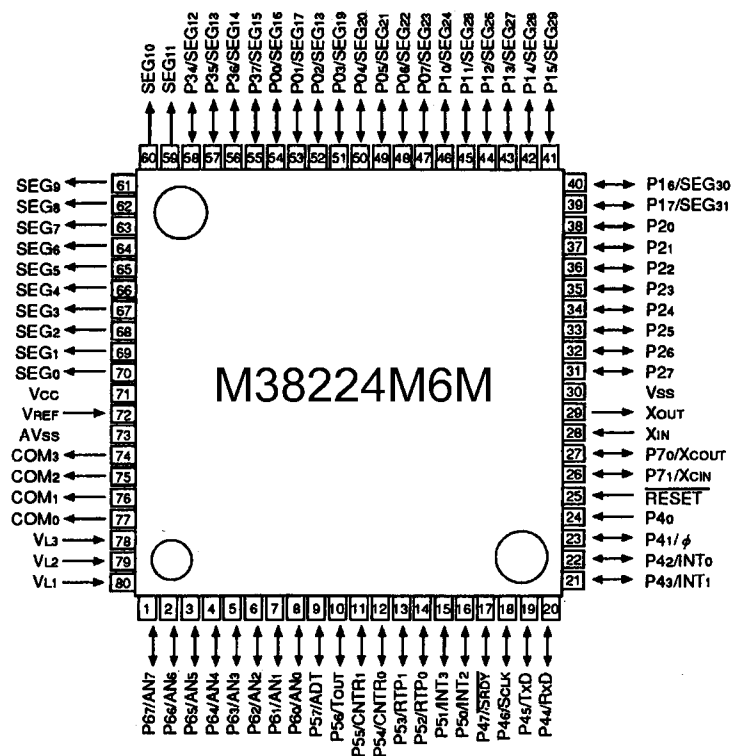
#### The 2nd Local

IC1 compares the frequency gained by dividing the signal added to pin 19 of IC1 by the control signal from IC7 with the frequency gained by dividing the reference frequency of 12.8 MHz inside IC1. When the phase difference is found as a result of phase comparison, the pulse signal is output from the charge pump output of pin 13 of IC1, then the signal is converted into the DC voltage at the inside circuit for active filter and added to the cathode side of VCO vari-cap D20 and D21 to make the phases equal. In result the stabilized oscillation can be done at the desired frequency.

## 2) M38224M6M (E:XA0862, T:XA0836)

CPU

Terminal Connection  
(TOP VIEW)



### 3) Terminal function of CPU

| No. | Terminal | Signal | I/O | Description          |
|-----|----------|--------|-----|----------------------|
| 1   | AN7      | BAT    | AD  | Battery input        |
| 2   | P66      | S/M    | O   | Stereo / Monophonic  |
| 3   | P65      | RESW   | I   | R/E push key         |
| 4   | AN4      | SQL    | AD  | Squelch input        |
| 5   | AN3      | SMT    | AD  | S-meter input        |
| 6   | P62      | AFPC   | O   | AF power supply      |
| 7   | P61      | BND3   | O   | Band3 SW             |
| 8   | P60      | BND6   | O   | Band6 SW             |
| 9   | P57      | BND2   | O   | Band2 SW             |
| 10  | P56      | BND4   | O   | Band4 SW             |
| 11  | P55      | BND5   | O   | Band5 SW             |
| 12  | P54      | BND1   | O   | Band1 SW             |
| 13  | P53      | ABAR   | O   | Antenna SW           |
| 14  | P52      | SBAR   | O   | Antenna SW           |
| 15  | INT3     | RE2    | I   | Rotary encoder input |
| 16  | P50      | RE1    | I   | Rotary encoder input |
| 17  | P47      | RC     | O   | RX SW                |
| 18  | P46      | ASW    | O   | Antenna SW           |
| 19  | TXD      | CTX    | O   | Clone TX             |
| 20  | RXD      | CRX    | I   | Clone RX             |
| 21  | P43/INT1 | PSW    | I   | Power key            |
| 22  | INT0     | BU     | I   | Backup interrupt     |
| 23  | P41      | BEEP   | O   | Beep output          |
| 24  | P40      | JKDT   | I   | Jack state input     |
| 25  | RESET    | RST    | I   | Reset interrupt      |
| 26  | P71      | SCK    | O   | EEPROM clock         |
| 27  | P70      | SDA    | I/O | EEPROM data          |
| 28  | XIN      | XIN    | I   | Clock input          |
| 29  | XOUT     | XOUT   | O   | Clock output         |
| 30  | VSS      | VSS    |     | GND                  |
| 31  | P27      | SW2    | I   | Key input            |
| 32  | P26      | SW3    | I   | Key input            |
| 33  | P25      | SW4    | I   | Key input            |
| 34  | P24      | SW301  | I   | Key input            |
| 35  | P23      | SW302  | I   | Key input            |
| 36  | P22      | CLNSW  | O   | Clone SW             |
| 37  | P21      | STB2   | O   | DAC strobe           |
| 38  | P20      | DATA   | I/O | Data / Unlock        |
| 39  | SEG22    | SEG22  |     |                      |
| 40  | SEG21    | SEG21  |     |                      |

| No | Terminal | Signal | I/O | Description          |
|----|----------|--------|-----|----------------------|
| 41 | SEG20    | SEG20  |     |                      |
| 42 | SEG19    | SEG19  |     |                      |
| 43 | SEG18    | SEG18  |     |                      |
| 44 | P12      | DBC    | O   | Doubler SW           |
| 45 | P11      | C3C    | O   | Common power SW      |
| 46 | P10      | SCT    | O   | Secret signal output |
| 47 | P07      | AFS    | O   | AF SW                |
| 48 | P06      | CLK    | O   | Clock                |
| 49 | P05      | STB1   | O   | PLL strobe           |
| 50 | P04      | PLLC   | O   | PLL power supply     |
| 51 | P03      | P1C    | O   | PLL 1ch SW           |
| 52 | P02      | P2C    | O   | PLL 2ch SW           |
| 53 | SEG17    | SEG17  |     |                      |
| 54 | SEG16    | SEG16  |     |                      |
| 55 | SEG15    | SEG15  |     |                      |
| 56 | SEG14    | SEG14  |     |                      |
| 57 | SEG13    | SEG13  |     |                      |
| 58 | SEG12    | SEG12  |     |                      |
| 59 | SEG11    | SEG11  |     |                      |
| 60 | SEG10    | SEG10  |     |                      |
| 61 | SEG9     | SEG9   |     |                      |
| 62 | SEG8     | SEG8   |     |                      |
| 63 | SEG7     | SEG7   |     |                      |
| 64 | SEG6     | SEG6   |     |                      |
| 65 | SEG5     | SEG5   |     |                      |
| 66 | SEG4     | SEG4   |     |                      |
| 67 | SEG3     | SEG3   |     |                      |
| 68 | SEG2     | SEG2   |     |                      |
| 69 | SEG1     | SEG1   |     |                      |
| 70 | SEG0     | SEG0   |     |                      |
| 71 | VCC      | VDD    |     |                      |
| 72 | VREF     | VDD    |     |                      |
| 73 | AVSS     | GND    |     |                      |
| 74 | COM3     | COM3   |     |                      |
| 75 | COM2     | COM2   |     |                      |
| 76 | COM1     | COM1   |     |                      |
| 77 | COM0     | COM0   |     |                      |
| 78 | VL3      | VL3    |     |                      |
| 79 | VL2      | VL2    |     |                      |
| 80 | VL1      | VL1    |     |                      |

# SEMICONDUCTOR DATA

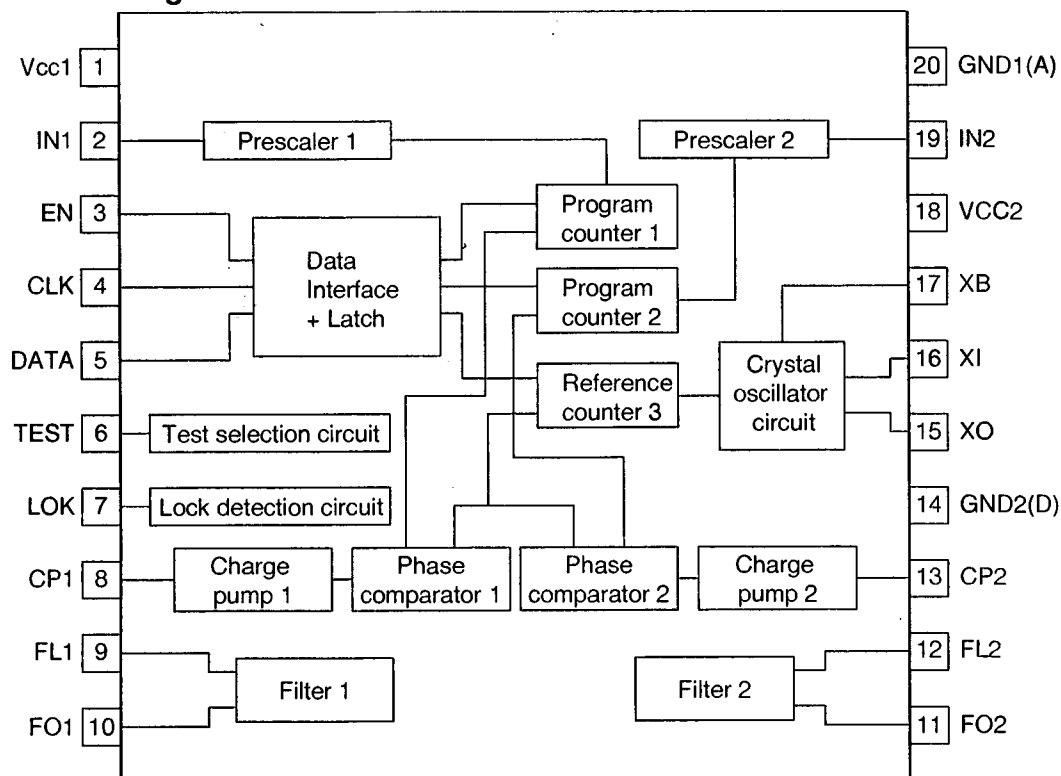
## 1) uPD3140GS-E1 (XA0312)

80 ~ 550MHz Dual PLL Synthesizer

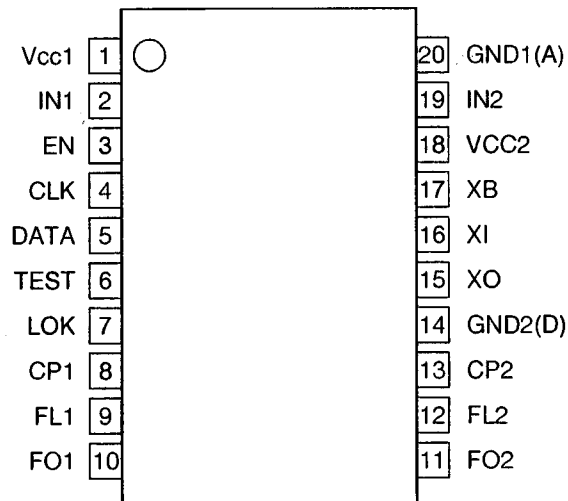
### Specifications

Operating frequency: 200 ~ 400MHz (Vin=-12 ~ -0dBm, pin 2 and 19 input)  
 80 ~ 550MHz (Vin=-8 ~ -0dBm, pin 2 and 19 input)  
 Consumption current: 2.7 ~ 4.1mA (Vcc=1.8V while 1 channel is used)  
 4.3 ~ 6.6mA (Vcc=1.8V while both channels are used)  
 0 ~ 10uA (Vcc=1.8V in power save mode)  
 3.5 ~ 5.3mA (Vcc=5V while 1 channel is used)  
 5.6 ~ 8.6mA (Vcc=5V while both channels are used)  
 Operating voltage: 1.8 ~ 5.5V

### Block Diagram

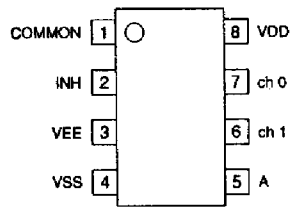


### Terminal Connection

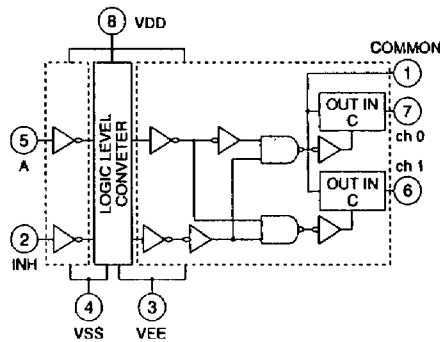


## 2) TC4W53FU (XA0348)

Pin Assignment

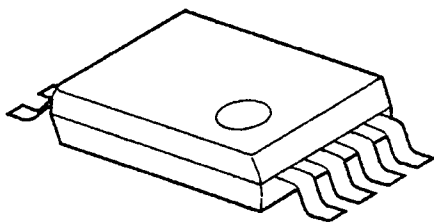


Block Diagram

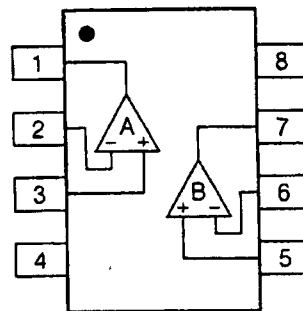


## 3) NJM2904V (XA0573)

Dual Single Supply Operational Amplifier



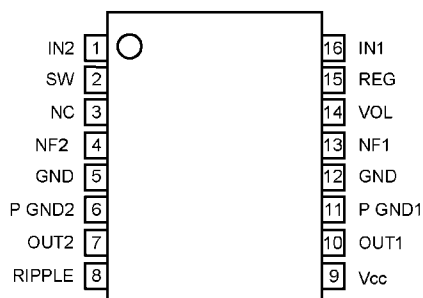
(Top View)



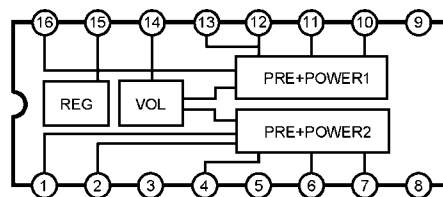
- 1: A OUTPUT
- 2: A - INPUT
- 3: A + INPUT
- 4: GND
- 5: B + INPUT
- 6: B - INPUT
- 7: B OUTPUT
- 8: V+

## 4) CXA1622M/P (XA0787)

Pin Assignment



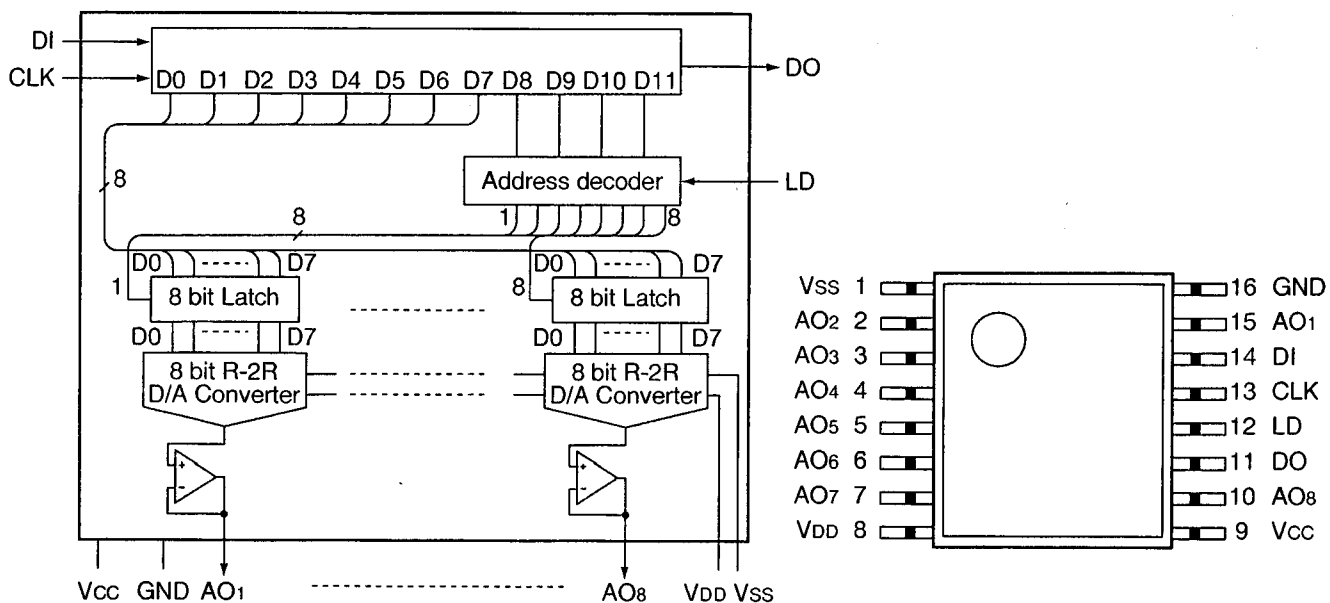
Block Diagram



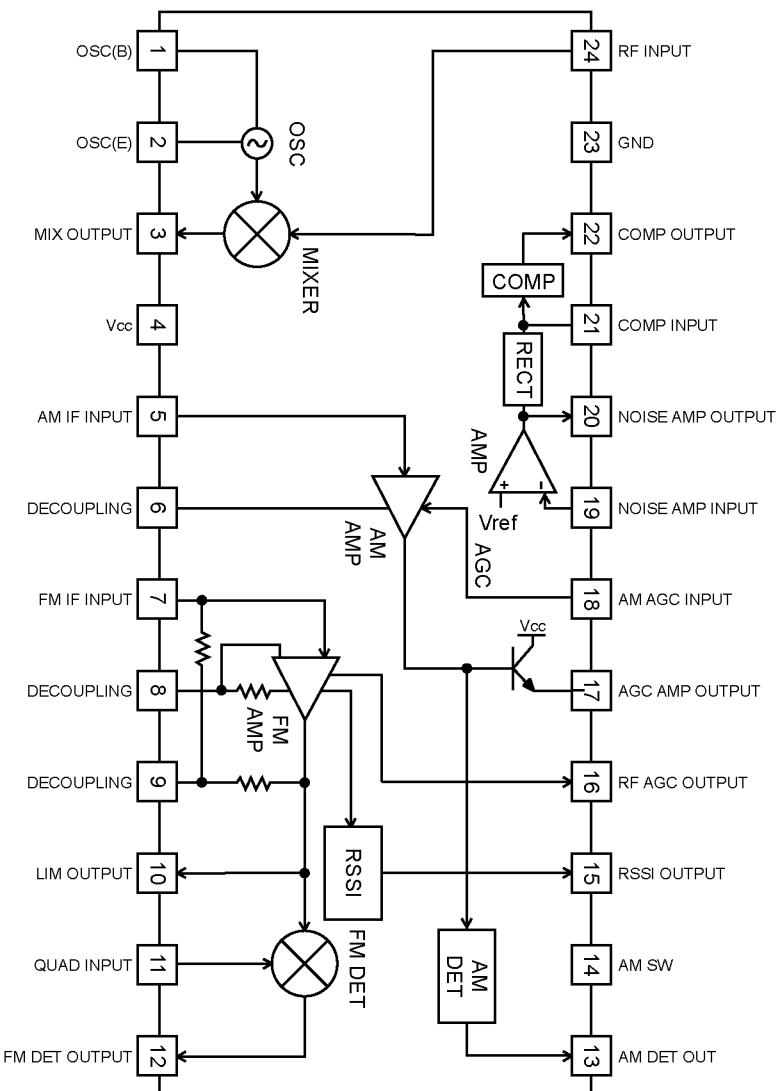
## 5) MB88347LPFV-G-BND-EF (XA0599)

D/A converter for digital tuning

### Block Diagram

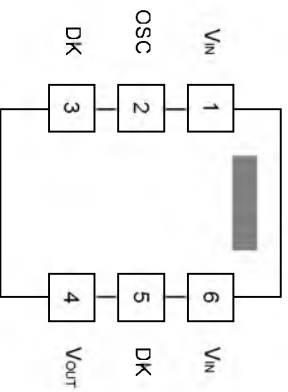


| Pin No.                                | Name   | I/O | Descriptions  |
|--|--|-----|---|
| 14                                     | DI   | I   | Serial data input terminal. Input 12 bit serial data. (Do not leave it open.)   |
| 11                                     | DO   | O   | The MSB bit data of 12 bit shift register is output at the falling edge of CLK.   |
| 13                                     | CLK  | I   | Shift clock input terminal. The input signal of DI terminal is input to 12 bit shift register at the rising edge of clock shift. (Do not leave it open.)              |
| 12                                     | LD   | I   | When LD terminal is "High", the value of shift register is loaded in decoder and D/A output register. (Do not leave it open. Fix to "Low" when no data is transited.) |
| 15<br>2<br>3<br>4<br>5<br>6<br>7<br>10 | AO1<br>AO2<br>AO3<br>AO4<br>AO5<br>AO6<br>AO7<br>AO8 | O   | 8 bit D/A converter output terminal with operational amplifier.   |
| 9                                      | Vcc  | -   | MCU interface, power supply terminal of operational amplifier.  |
| 16                                     | GND  | -   | MCU interface, ground terminal of operational amplifier.  |
| 8                                      | VDD  | -   | Reference power supply (High) input terminal of D/A converter.  |
| 1                                      | VSS  | -   | Reference power supply (Low) input terminal of D/A converter.   |

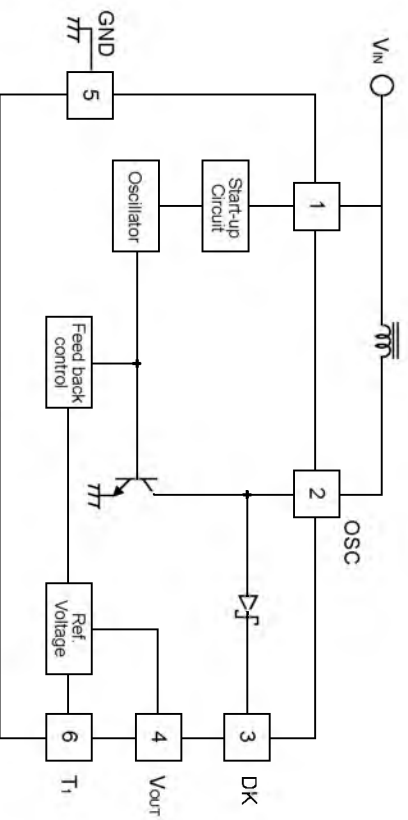


## 6) TK11816M (XA0665)

Pin Assignment



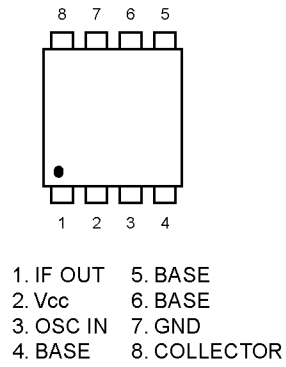
Block Diagram



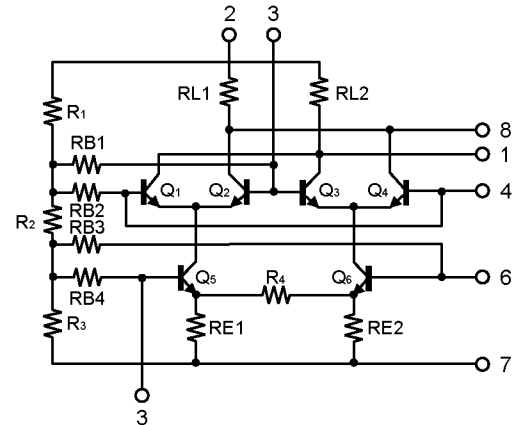
## 7) TK10931V (XA0666)

## 8) TA4101F TE12L (XA0667)

Pin Assignment

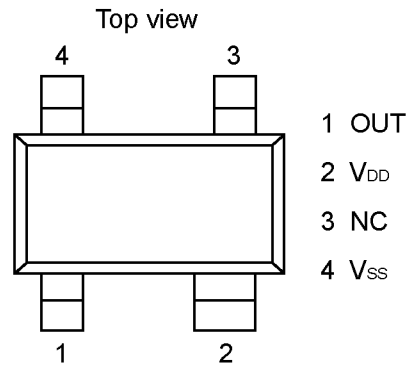


Block Diagram

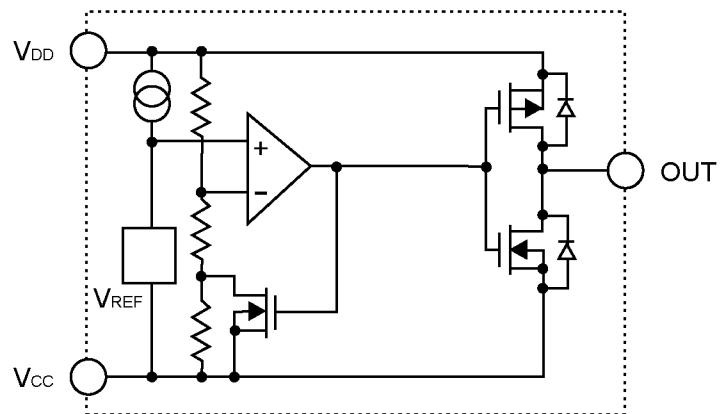


## 9) S-80828ALNP-EAR-T2 (XA0834)

Pin Assignment

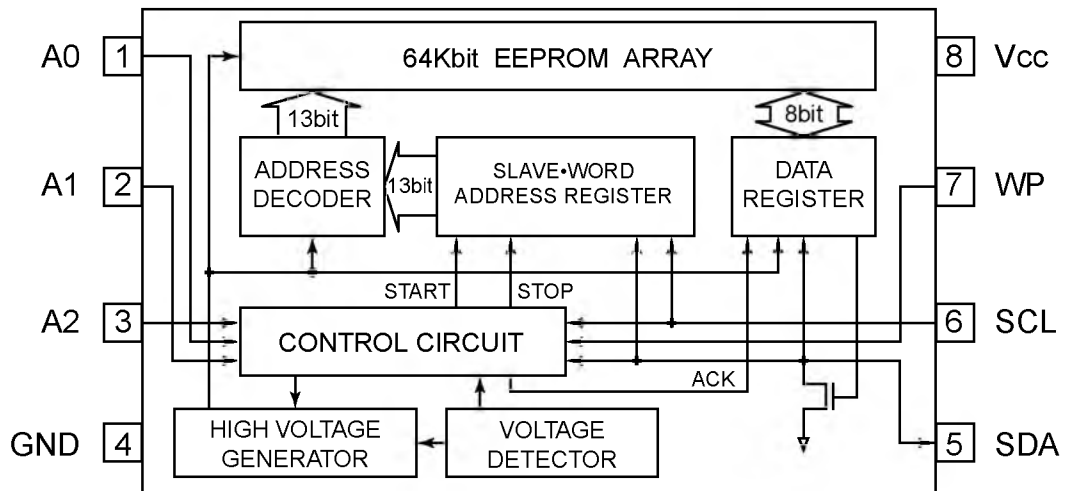


Block Diagram

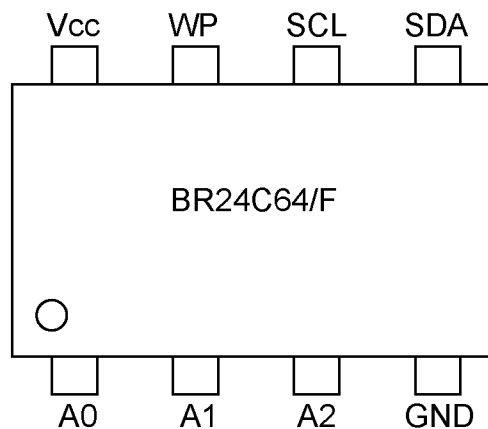


## 10) BR24C64F-E2 (XA0669)

Block Diagram

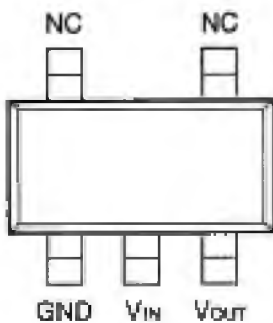


Pin Assignment

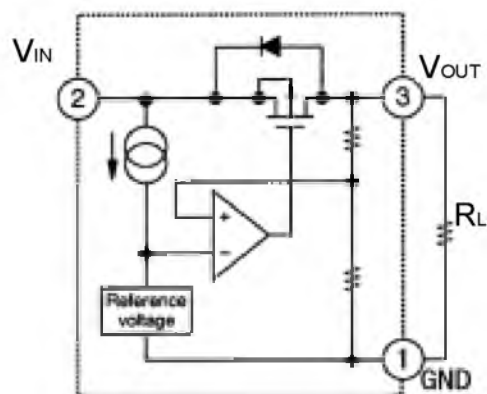


## 11) S-81230SG-QB-X (XA0833)

Pin Assignment

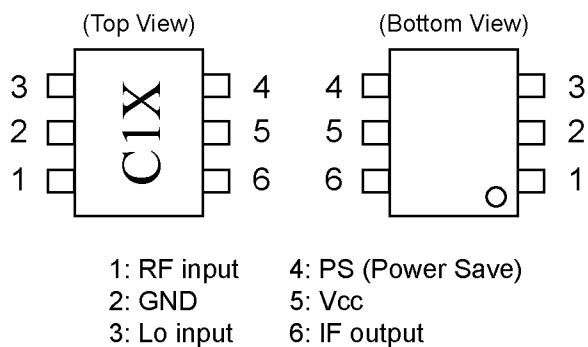


Block Diagram

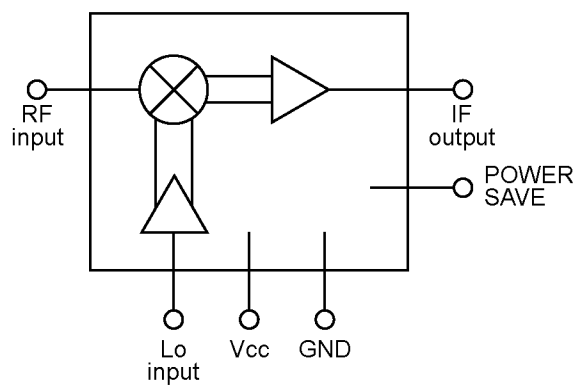


## 12) uPC2757T-E3 (XA0743)

### Terminal Connection

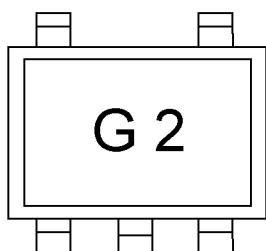


### Block Diagram

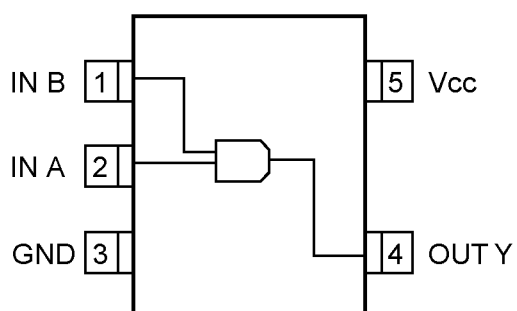


## 13) TC7SET08FU (XA0586)

### Pin Assignment

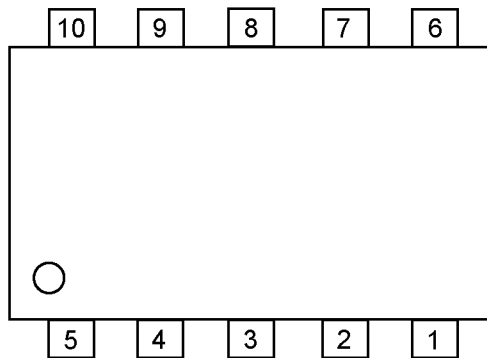


### Block Diagram



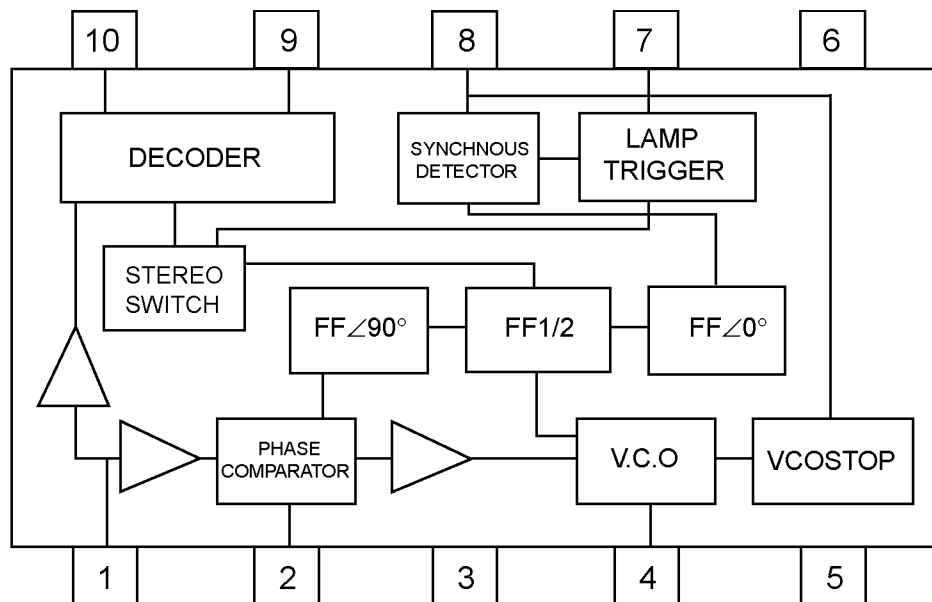
## 14)LA3335M (XA0786)

### Pin Assignment



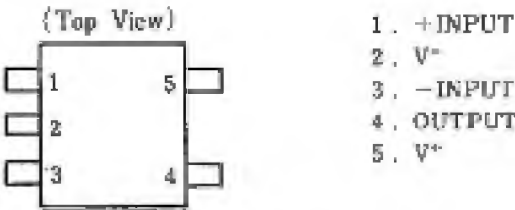
- |                    |                            |
|--------------------|----------------------------|
| 1: Input           | 6: GND                     |
| 2: PLL loop filter | 7: Stereo indicator filter |
| 3: Power supply    | 8: Pilot sync detection    |
| 4: VCO             | 9: Decoder output (low)    |
| 5: NC              | 10: Decoder output (high)  |

### Block Diagram

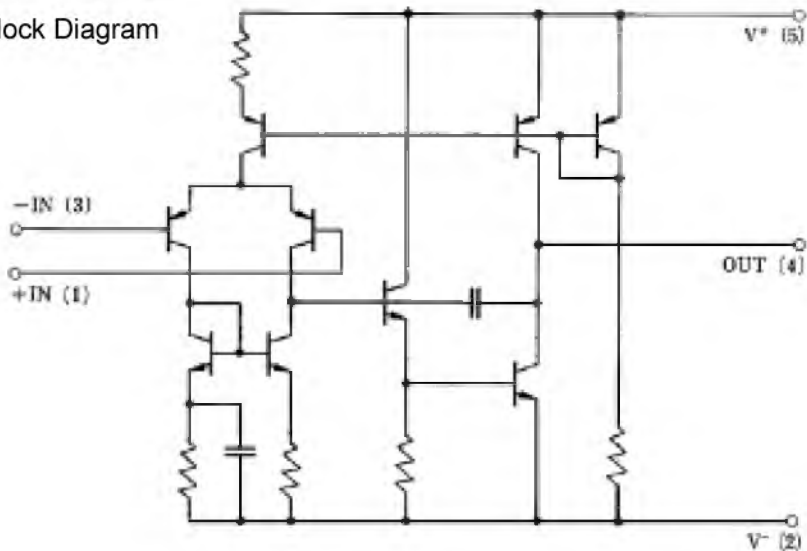


15) NJM2107 (XA0850)

Pin Assignment



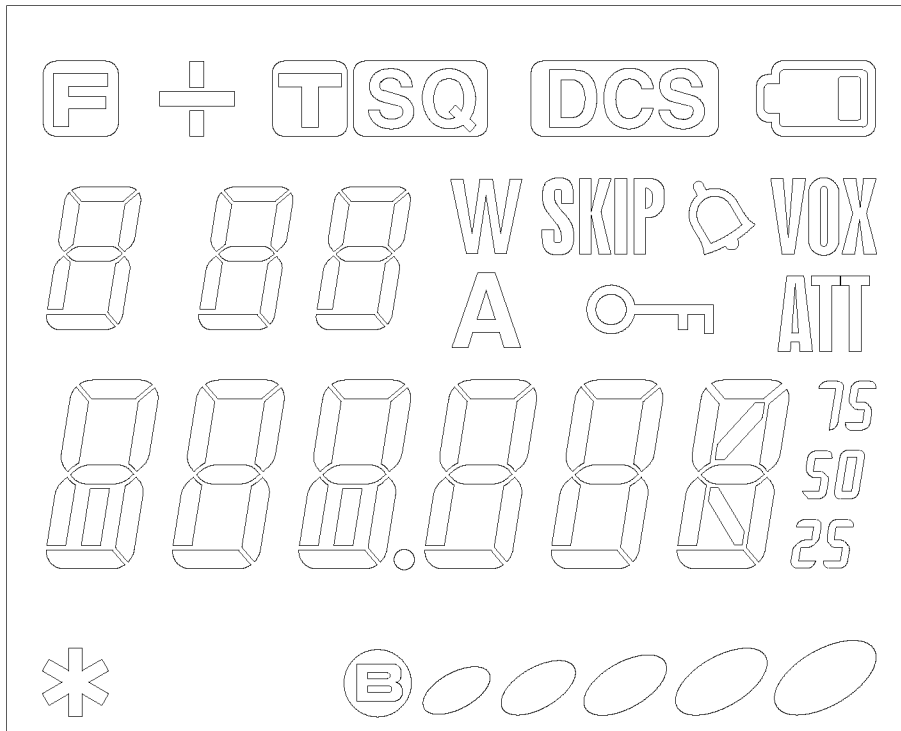
Block Diagram



16) Transistor, Diode and LED Outline Drawings

|                          |                            |                              |                       |                          |                      |                        |
|--------------------------|----------------------------|------------------------------|-----------------------|--------------------------|----------------------|------------------------|
| 1SV308(TPH3)<br>XD0339   | DAN235E-TL<br>XD0320       | MA2S357-TX<br>XD0337         | ISS390 TE61<br>XD0342 | MA2S30400L<br>XD0312     | MA2S728-TX<br>XD0315 | ISS362 TE85L<br>XD0338 |
|                          |                            |                              |                       |                          |                      |                        |
| SML-310MTT86<br>XL0036   | 2SC4738BL(TE85R)<br>XT0181 | 2SC5066FT-Y(TE85L)<br>XT0180 | 2SD2216R-TX<br>XT0135 | 2SJ144Y(TE85R)<br>XE0019 | MA2Z720<br>XD0367    | 2SB1132T<br>XT0061     |
|                          |                            |                              |                       |                          |                      |                        |
| 2SK881Y(TE85R)<br>XE0036 | UN911H TX<br>XU0092        | DTC143TE TL<br>XU0106        | XP01501<br>XU0172     | 2SK1580<br>XE0029        |                      |                        |
|                          |                            |                              |                       |                          |                      |                        |
| UMC5N TR<br>XU0152       | XP1111-TX<br>XU0171        |                              |                       |                          |                      |                        |
|                          |                            |                              |                       |                          |                      |                        |
|                          |                            |                              |                       |                          |                      |                        |

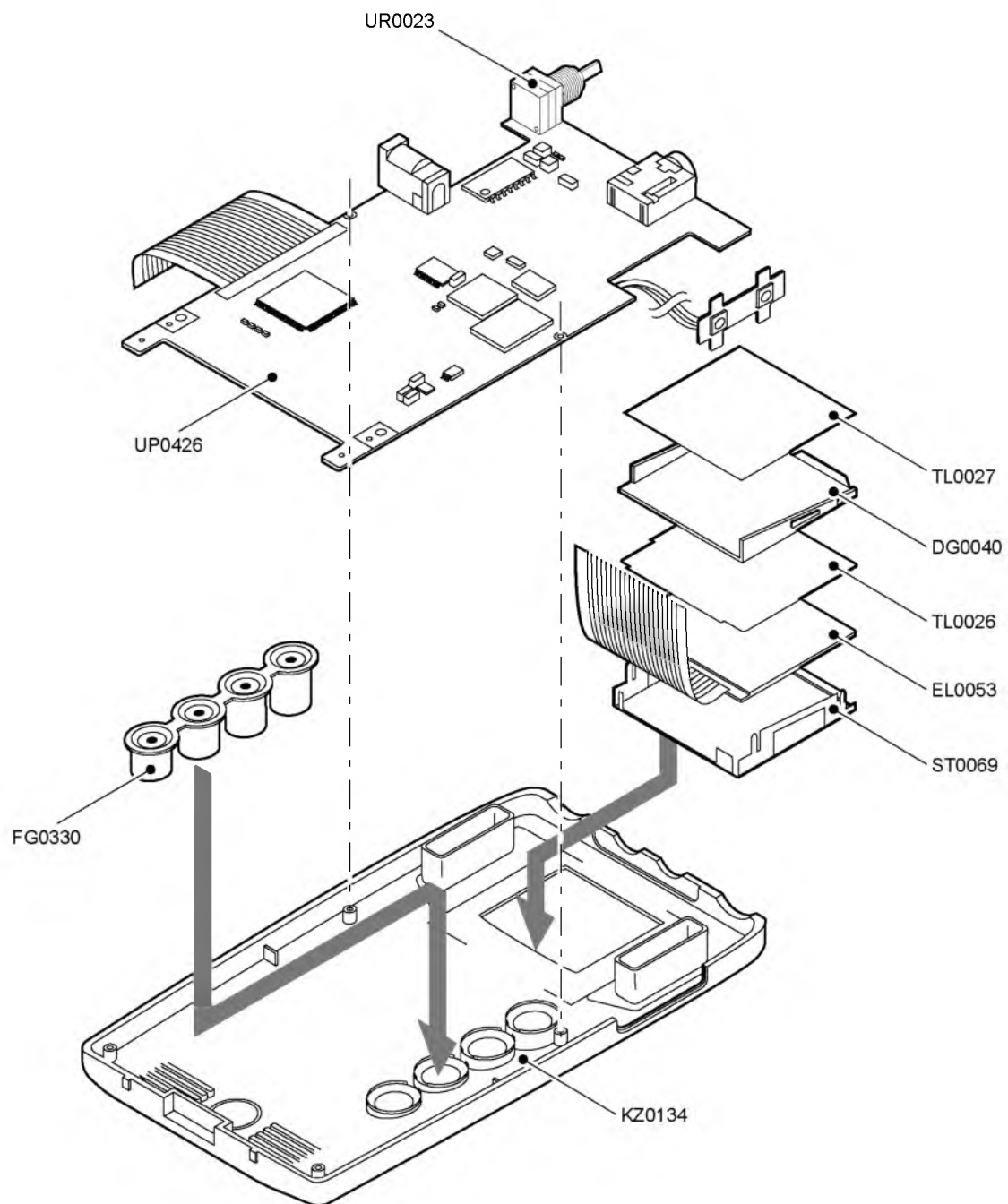
## 17) LCD connection



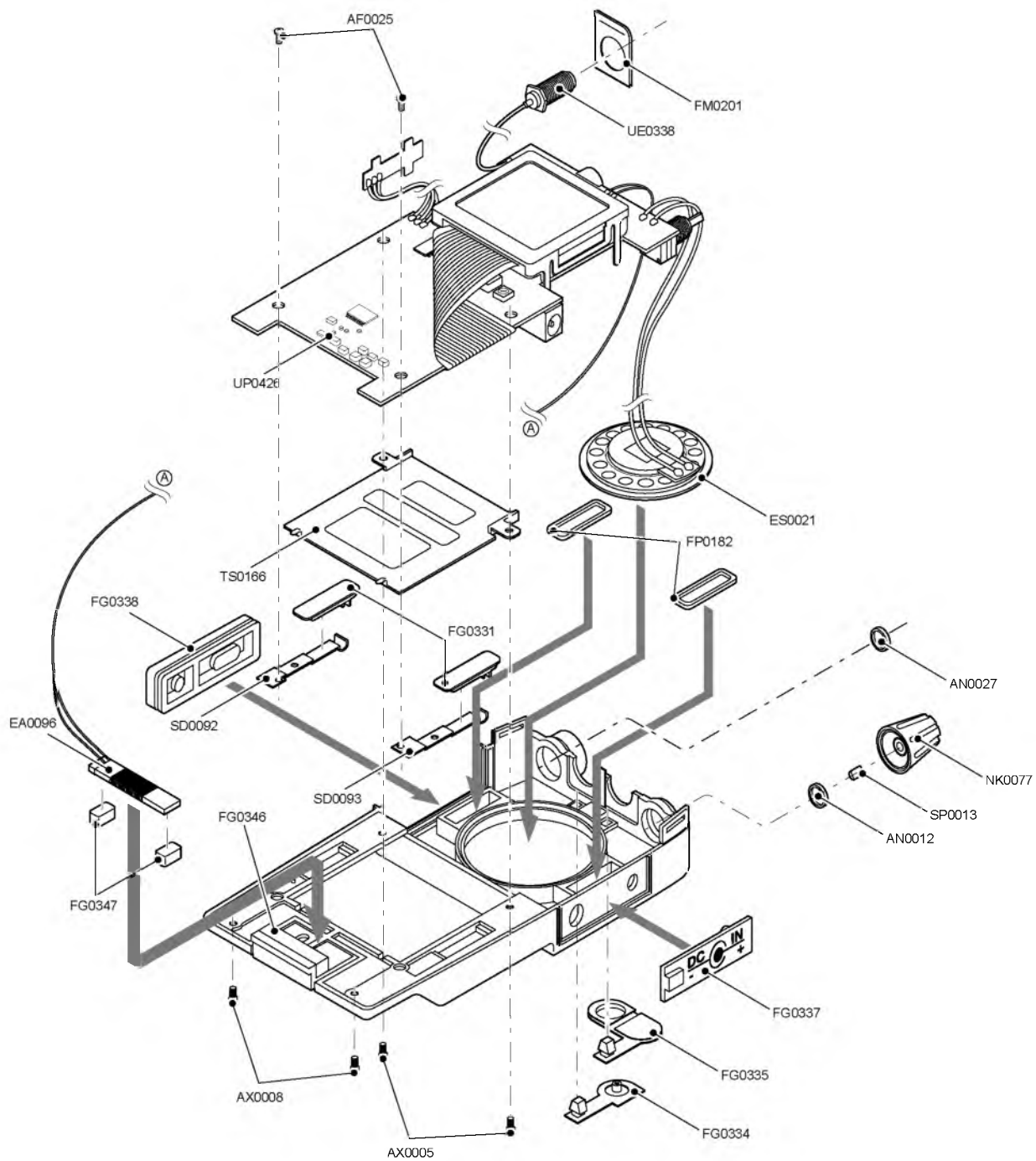
| Pin No | COM0 | COM1 | COM2 | COM3 |
|--------|------|------|------|------|
| 1      | COM0 | -    | -    | -    |
| 2      | -    | COM1 | -    | -    |
| 3      | -    | -    | COM2 | -    |
| 4      | -    | -    | -    | COM3 |
| 5      | D    | E    | F    | C    |
| 6      | H    | I    | J    | G    |
| 7      | L    | M    | N    | K    |
| 8      | P    | O    | V    | W    |
| 9      | R    | S    | U    | T    |
| 10     | 9c   | 9b   | 9a   | Y    |
| 11     | 9e   | 9g   | 9f   | 9d   |
| 12     | 8c   | 8b   | 8a   | X    |
| 13     | 8e   | 8g   | 8f   | 8d   |
| 14     | 7c   | 7b   | 7a   | Z    |
| 15     | 7e   | 7g   | 7f   | 7d   |
| 16     | 6c   | 6b   | 6a   | 6h   |
| 17     | 6e   | 6g   | 6f   | 6d   |
| 18     | 5c   | 5b   | 5a   | Q    |
| 19     | 5e   | 5g   | 5f   | 5d   |
| 20     | 4c   | 4b   | 4a   | 4h   |
| 21     | 4e   | 4g   | 4f   | 4d   |
| 22     | 3c   | 3b   | 3a   | B2   |
| 23     | 3e   | 3g   | 3f   | 3d   |
| 24     | 2c   | 2b   | 2a   | B1   |
| 25     | 2e   | 2g   | 2f   | 2d   |
| 26     | 1c   | 1b   | 1a   | A    |
| 27     | 1e   | 1g   | 1f   | 1d   |

## EXPLODED VIEW

### 1) Front View



## 2) Bottom View



# PARTS LIST

## MAIN Unit

| Ref.No | Parts No | Descriptin  | Parts Name       | Ver |
|--------|----------|-------------|------------------|-----|
| C1     | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C2     | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C3     | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C4     | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C5     | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C6     | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C7     | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C8     | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C9     | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C10    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C11    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C12    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C13    | CS0395   | Chip Tantal | TMCMB0G686MTR    |     |
| C14    | CS0418   | Chip Tantal | TMCMC1C476MTR    |     |
| C15    | CU3506   | Chip C.     | GRM36CH050C50PT  |     |
| C16    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C17    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C18    | CS0411   | Chip Tantal | 4MCM226MATER     |     |
| C19    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C20    | CU3512   | Chip C.     | GRM36CH120J50PT  |     |
| C21    | CU3511   | Chip C.     | GRM36CH100D50PT  |     |
| C22    | CU3518   | Chip C.     | GRM36CH390J50PT  |     |
| C23    | CU3523   | Chip C.     | GRM36CH101J50PT  |     |
| C24    | CS0397   | Chip Tantal | TMCP1C105MTR     |     |
| C25    | CS0395   | Chip Tantal | TMCMB0G686MTR    |     |
| C26    | CS0396   | Chip Tantal | TMCP1D104MTR     |     |
| C27    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C28    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C29    | CU3501   | Chip C.     | GRM36CK0R5C50PT  |     |
| C30    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C31    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C32    | CS0397   | Chip Tantal | TMCP1C105MTR     |     |
| C33    | CS0411   | Chip Tantal | 4MCM226MATER     |     |
| C34    | CU3523   | Chip C.     | GRM36CH101J50PT  |     |
| C35    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C36    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C37    | CS0396   | Chip Tantal | TMCP1D104MTR     |     |
| C38    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C39    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C40    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C41    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C42    | CS0397   | Chip Tantal | TMCP1C105MTR     |     |
| C43    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C44    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C45    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C46    | CU3515   | Chip C.     | GRM36CH220J50PT  |     |
| C47    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C48    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C49    | CU3503   | Chip C.     | GRM36CK020C50PT  |     |
| C50    | CU3503   | Chip C.     | GRM36CK020C50PT  |     |
| C51    | CU3503   | Chip C.     | GRM36CK020C50PT  |     |
| C52    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C53    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |

| Ref.No | Parts No | Descriptin  | Parts Name       | Ver |
|--------|----------|-------------|------------------|-----|
| C54    | CU3503   | Chip C.     | GRM36CK020C50PT  |     |
| C55    | CS0397   | Chip Tantal | TMCP1C105MTR     |     |
| C56    | CU3515   | Chip C.     | GRM36CH220J50PT  |     |
| C57    | CS0403   | Chip Tantal | TMCP1D224MTR     |     |
| C58    | CU3523   | Chip C.     | GRM36CH101J50PT  |     |
| C59    | CU3527   | Chip C.     | GRM36CH221J25PT  |     |
| C60    | CU3527   | Chip C.     | GRM36CH221J25PT  |     |
| C61    | CU3523   | Chip C.     | GRM36CH101J50PT  |     |
| C62    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C63    | CS0411   | Chip Tantal | 4MCM226MATER     |     |
| C64    | CU3503   | Chip C.     | GRM36CK020C50PT  |     |
| C65    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C66    | CU3515   | Chip C.     | GRM36CH220J50PT  |     |
| C67    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C68    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C69    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C70    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C71    | CU3527   | Chip C.     | GRM36CH221J25PT  |     |
| C72    | CU3514   | Chip C.     | GRM36CH180J50PT  |     |
| C73    | CU3510   | Chip C.     | GRM36CH090D50PT  |     |
| C74    | CS0395   | Chip Tantal | TMCMB0G686MTR    |     |
| C75    | CU3504   | Chip C.     | GRM36CJ030C50PT  |     |
| C76    | CU3551   | Chip C.     | GRM36B223K16PT   |     |
| C77    | CS0397   | Chip Tantal | TMCP1C105MTR     |     |
| C78    | CU3527   | Chip C.     | GRM36CH221J25PT  |     |
| C79    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C80    | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C81    | CS0412   | Chip Tantal | 16MCM156MB2TER   |     |
| C82    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C83    | CU3521   | Chip C.     | GRM36CH680J50PT  |     |
| C84    | CU3521   | Chip C.     | GRM36CH680J50PT  |     |
| C85    | CU3516   | Chip C.     | GRM36CH270J50PT  |     |
| C86    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C87    | CU3517   | Chip C.     | GRM36CH330J50PT  |     |
| C88    | CU3520   | Chip C.     | GRM36CH560J50PT  |     |
| C89    | CU3517   | Chip C.     | GRM36CH330J50PT  |     |
| C90    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C91    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C92    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C93    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C94    | CU3505   | Chip C.     | GRM36CH040C50PT  |     |
| C95    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C96    | CU3547   | Chip C.     | GRM36B103K16PT   |     |
| C97    | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C98    | CU3513   | Chip C.     | GRM36CH150J50PT  |     |
| C99    | CU3509   | Chip C.     | GRM36CH080D50PT  |     |
| C100   | CU3111   | Chip C.     | C1608JB1C104KT-N |     |
| C101   | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C102   | CS0378   | Chip Tantal | TMCMC0G107MTR    |     |
| C103   | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C104   | CU3535   | Chip C.     | GRM36B102K50PT   |     |
| C105   | CU3512   | Chip C.     | GRM36CH120J50PT  |     |
| C106   | CU3535   | Chip C.     | GRM36B102K50PT   |     |

| Ref.No. | Parts No. | Descriptin  | Parts Name       | Ver |
|---------|-----------|-------------|------------------|-----|
| C107    | CU3502    | Chip C.     | GRM36CK010C50PT  |     |
| C108    | CU3509    | Chip C.     | GRM36CH080D50PT  |     |
| C109    | CU3509    | Chip C.     | GRM36CH080D50PT  |     |
| C110    | CU3518    | Chip C.     | GRM36CH390J50PT  |     |
| C111    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C112    | CU3516    | Chip C.     | GRM36CH270J50PT  |     |
| C113    | CU3520    | Chip C.     | GRM36CH560J50PT  |     |
| C114    | CU3516    | Chip C.     | GRM36CH270J50PT  |     |
| C115    | CU3551    | Chip C.     | GRM36B223K16PT   |     |
| C116    | CS0408    | Chip Tantal | 6MCM156MATER     |     |
| C117    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C118    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C119    | CU3515    | Chip C.     | GRM36CH220J50PT  |     |
| C120    | CU3506    | Chip C.     | GRM36CH050C50PT  |     |
| C121    | CU3506    | Chip C.     | GRM36CH050C50PT  |     |
| C122    | CU3518    | Chip C.     | GRM36CH390J50PT  |     |
| C123    | CU3551    | Chip C.     | GRM36B223K16PT   |     |
| C124    | CU3523    | Chip C.     | GRM36CH101J50PT  |     |
| C125    | CU3523    | Chip C.     | GRM36CH101J50PT  |     |
| C126    | CU3551    | Chip C.     | GRM36B223K16PT   |     |
| C127    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C128    | CU3551    | Chip C.     | GRM36B223K16PT   |     |
| C129    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C130    | CS0404    | Chip Tantal | 6MCM106MATER     |     |
| C131    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C132    | CU3514    | Chip C.     | GRM36CH180J50PT  |     |
| C133    | CU3517    | Chip C.     | GRM36CH330J50PT  |     |
| C134    | CU3514    | Chip C.     | GRM36CH180J50PT  |     |
| C135    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C136    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C137    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C138    | CS0408    | Chip Tantal | 6MCM156MATER     |     |
| C139    | CU3531    | Chip C.     | GRM36B471K50PT   |     |
| C140    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C141    | CU3511    | Chip C.     | GRM36CH100D50PT  |     |
| C142    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C143    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C144    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C145    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C146    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C147    | CS0408    | Chip Tantal | 6MCM156MATER     |     |
| C148    | CU3531    | Chip C.     | GRM36B471K50PT   |     |
| C150    | CS0411    | Chip Tantal | 4MCM226MATER     |     |
| C151    | CU3531    | Chip C.     | GRM36B471K50PT   |     |
| C152    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C153    | CU3511    | Chip C.     | GRM36CH100D50PT  |     |
| C154    | CU3503    | Chip C.     | GRM36CK020C50PT  |     |
| C155    | CU3503    | Chip C.     | GRM36CK020C50PT  |     |
| C156    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C157    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C158    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C159    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C160    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C161    | CU3547    | Chip C.     | GRM36B103K16PT   |     |
| C162    | CU3535    | Chip C.     | GRM36B102K50PT   |     |
| C163    | CS0408    | Chip Tantal | 6MCM156MATER     |     |
| C164    | CU3513    | Chip C.     | GRM36CH150J50PT  |     |
| C165    | CU3517    | Chip C.     | GRM36CH330J50PT  |     |
| C166    | CU3515    | Chip C.     | GRM36CH220J50PT  |     |
| C167    | CU3111    | Chip C.     | C1608JB1C104KT-N |     |
| C168    | CS0396    | Chip Tantal | TMCP1D104MTR     |     |

| Ref.No. | Parts No. | Descriptin  | Parts Name        | Ver |
|---------|-----------|-------------|-------------------|-----|
| C169    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C170    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C171    | CU3517    | Chip C.     | GRM36CH330J50PT   |     |
| C172    | CU3517    | Chip C.     | GRM36CH330J50PT   |     |
| C173    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C174    | CS0398    | Chip Tantal | TMCP0J225MTR      |     |
| C175    | CS0398    | Chip Tantal | TMCP0J225MTR      |     |
| C176    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C177    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C178    | CU3547    | Chip C.     | GRM36B103K16PT    |     |
| C179    | CU3513    | Chip C.     | GRM36CH150J50PT   |     |
| C180    | CU3531    | Chip C.     | GRM36B471K50PT    |     |
| C181    | CS0418    | Chip Tantal | TMCMC1C476MTR     |     |
| C182    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C183    | CU3531    | Chip C.     | GRM36B471K50PT    |     |
| C184    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C185    | CU3535    | Chip C.     | GRM36B102K50PT    |     |
| C186    | CU3535    | Chip C.     | GRM36B102K50PT    |     |
| C187    | CU3531    | Chip C.     | GRM36B471K50PT    |     |
| C188    | CU3507    | Chip C.     | GRM36CH060D50PT   |     |
| C189    | CU3504    | Chip C.     | GRM36CJ030C50PT   |     |
| C190    | CU3504    | Chip C.     | GRM36CJ030C50PT   |     |
| C191    | CU3509    | Chip C.     | GRM36CH080D50PT   |     |
| C192    | CU0108    | Chip C.     | LMK212BJ105KG     |     |
| C193    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C194    | CU3503    | Chip C.     | GRM36CK020C50PT   |     |
| C195    | CS0395    | Chip Tantal | TMCMC0G686MTR     |     |
| C196    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C197    | CU3518    | Chip C.     | GRM36CH390J50PT   |     |
| C198    | CU3535    | Chip C.     | GRM36B102K50PT    |     |
| C199    | CS0411    | Chip Tantal | 4MCM226MATER      |     |
| C200    | CS0395    | Chip Tantal | TMCMC0G686MTR     |     |
| C201    | CU3547    | Chip C.     | GRM36B103K16PT    |     |
| C202    | CU3547    | Chip C.     | GRM36B103K16PT    |     |
| C203    | CU0108    | Chip C.     | LMK212BJ105KG     |     |
| C204    | CS0398    | Chip Tantal | TMCP0J225MTR      |     |
| C205    | CU0108    | Chip C.     | LMK212BJ105KG     |     |
| C206    | CU3551    | Chip C.     | GRM36B223K16PT    |     |
| C207    | CU3551    | Chip C.     | GRM36B223K16PT    |     |
| C208    | CS0397    | Chip Tantal | TMCP1C105MTR      |     |
| C209    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C210    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C211    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C212    | CS0398    | Chip Tantal | TMCP0J225MTR      |     |
| C213    | CS0395    | Chip Tantal | TMCMC0G686MTR     |     |
| C214    | CU3111    | Chip C.     | C1608JB1C104KT-N  |     |
| C215    | CU3523    | Chip C.     | GRM36CH101J50PT   |     |
| C216    | CU3545    | Chip C.     | GRM36B682K25PT    |     |
| C217    | CU3545    | Chip C.     | GRM36B682K25PT    |     |
| C218    | CU3027    | Chip C.     | C1608CH1H221JT-AS |     |
| C219    | CU3535    | Chip C.     | GRM36B102K50PT    |     |
| C220    | CU3551    | Chip C.     | GRM36B223K16PT    |     |
| D1      | XD0339    | Diode       | 1SV308(TPH3)      |     |
| D2      | XD0342    | Diode       | 1SS390 TE61       |     |
| D3      | XD0342    | Diode       | 1SS390 TE61       |     |
| D4      | XD0342    | Diode       | 1SS390 TE61       |     |
| D5      | XD0342    | Diode       | 1SS390 TE61       |     |
| D6      | XD0342    | Diode       | 1SS390 TE61       |     |
| D7      | XD0338    | Diode       | 1SS362(TE85L)     |     |
| D8      | XD0339    | Diode       | 1SV308(TPH3)      |     |
| D9      | XD0367    | Diode       | MA2Z720           |     |

| Ref.No. | Parts No. | Descriptin | Parts Name           | Ver |
|---------|-----------|------------|----------------------|-----|
| D10     | XD0342    | Diode      | 1SS390 TE61          |     |
| D11     | XD0320    | Diode      | DAN235E-TL           |     |
| D12     | XD0338    | Diode      | 1SS362(TE85L)        |     |
| D13     | XD0320    | Diode      | DAN235E-TL           |     |
| D14     | XD0252    | Diode      | MA741WK TX           |     |
| D15     | XD0337    | Diode      | MA2S357-TX           |     |
| D16     | XD0337    | Diode      | MA2S357-TX           |     |
| D17     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D18     | XD0342    | Diode      | 1SS390 TE61          |     |
| D19     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D20     | XD0312    | Diode      | MA2S30400L           |     |
| D21     | XD0312    | Diode      | MA2S30400L           |     |
| D22     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D23     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D24     | XD0320    | Diode      | DAN235E-TL           |     |
| D25     | XD0320    | Diode      | DAN235E-TL           |     |
| D26     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D27     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D28     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D29     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D30     | XD0315    | Diode      | MA2S728-TX           |     |
| D31     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D32     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D33     | XD0320    | Diode      | DAN235E-TL           |     |
| D34     | XD0320    | Diode      | DAN235E-TL           |     |
| D35     | XD0320    | Diode      | DAN235E-TL           |     |
| D36     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D37     | XD0342    | Diode      | 1SS390 TE61          |     |
| D38     | XD0320    | Diode      | DAN235E-TL           |     |
| D39     | XL0036    | Diode      | SML-310MTT86         |     |
| D40     | XL0036    | Diode      | SML-310MTT86         |     |
| D41     | XD0342    | Diode      | 1SS390 TE61          |     |
| D42     | XD0320    | Diode      | DAN235E-TL           |     |
| D43     | XD0342    | Diode      | 1SS390 TE61          |     |
| D44     | XD0320    | Diode      | DAN235E-TL           |     |
| D45     | XD0339    | Diode      | 1SV308(TPH3)         |     |
| D46     | XD0342    | Diode      | 1SS390 TE61          |     |
| FL1     | XC0071    | Filter     | WF447A SAW FILTER    |     |
| FL2     | XC0075    | Filter     | CFUCG450E-TC         |     |
| IC1     | XA0312    | Ic         | UPD3140GS-E1         |     |
| IC2     | XA0665    | Ic         | TK11816MT            |     |
| IC3     | XA0743    | Ic         | UPC2757T-E3          |     |
| IC4     | XA0743    | Ic         | UPC2757T-E3          |     |
| IC5     | XA0833    | Ic         | S-81230SG-QB-T1      |     |
| IC6     | XA0666    | Ic         | TK10931VTL           |     |
| IC7     | XA0836    | Ic         | M38227ECHP-OTP-X3T   | T   |
| IC7     | XA0862    | Ic         | M38224M6H-161HP      | E   |
| IC8     | XA0667    | Ic         | TA4101F (TE12L)      |     |
| IC9     | XA0348    | Ic         | TC4W53FU(TE12)       |     |
| IC10    | XA0834    | Ic         | S-80828ALNP-EAR-T2   |     |
| IC11    | XA0669    | Ic         | BR24C64F-E2          |     |
| IC12    | XA0573    | Ic         | NJM2904V-TE1         |     |
| IC13    | XA0786    | Ic         | LA3335M-TE-L         |     |
| IC14    | XA0787    | Ic         | CXA1622M T4          |     |
| IC15    | XA0599    | Ic         | MB88347LPFV-G-BND-EF |     |
| IC17    | XA0850    | Ic         | NJM2107F             |     |
| IC18    | XA0586    | Ic         | TC7SET08FU-TE85L     |     |
| JK1     | UJ0015    | Jack       | HEC2781 010020       |     |
| JK2     | UJ0019    | Jack       | HSJ1493-01-010       |     |
| L1      | QC0560    | Coil       | LL1608-FH8N2J        |     |
| L2      | QC0573    | Coil       | LL1608-FHR10J        |     |

| Ref.No. | Parts No. | Descriptin | Parts Name          | Ver |
|---------|-----------|------------|---------------------|-----|
| L4      | QC0586    | Coil       | LQW1608A15NJ00      |     |
| L5      | QC0507    | Coil       | LK16081R0K-T        |     |
| L6      | QC0507    | Coil       | LK16081R0K-T        |     |
| L7      | QC0510    | Coil       | LK1608330M-T        |     |
| L8      | QC0631    | Coil       | LL1608-FSR22J       |     |
| L9      | QC0631    | Coil       | LL1608-FSR22J       |     |
| L10     | QC0631    | Coil       | LL1608-FSR22J       |     |
| L11     | QC0506    | Coil       | LK1608R56K-T        |     |
| L12     | QC0506    | Coil       | LK1608R56K-T        |     |
| L13     | QC0489    | Coil       | LQH4N221J04         |     |
| L15     | QC0589    | Coil       | LQW1608A27NJ00      |     |
| L16     | QC0497    | Coil       | LQH4N102K04         |     |
| L17     | QC0630    | Coil       | LL1608-FSR18J       |     |
| L18     | QC0573    | Coil       | LL1608-FHR10J       |     |
| L19     | QC0573    | Coil       | LL1608-FHR10J       |     |
| L20     | QC0631    | Coil       | LL1608-FSR22J       |     |
| L21     | QC0628    | Coil       | LL1608-FSR12J       |     |
| L22     | QC0631    | Coil       | LL1608-FSR22J       |     |
| L23     | QC0507    | Coil       | LK16081R0K-T        |     |
| L24     | QC0570    | Coil       | LL1608-FH56NJ       |     |
| L25     | QC0571    | Coil       | LL1608-FH68NJ       |     |
| L26     | QC0568    | Coil       | LL1608-FH39NJ       |     |
| L27     | QC0566    | Coil       | LL1608-FH27NJ       |     |
| L28     | QC0573    | Coil       | LL1608-FHR10J       |     |
| L29     | QC0573    | Coil       | LL1608-FHR10J       |     |
| L30     | QC0566    | Coil       | LL1608-FH27NJ       |     |
| L31     | QC0563    | Coil       | LL1608-FH15NJ       |     |
| L32     | QC0566    | Coil       | LL1608-FH27NJ       |     |
| L33     | QC0564    | Coil       | LL1608-FH18NJ       |     |
| L34     | QC0570    | Coil       | LL1608-FH56NJ       |     |
| L35     | QC0570    | Coil       | LL1608-FH56NJ       |     |
| L36     | QC0563    | Coil       | LL1608-FH15NJ       |     |
| L37     | QC0560    | Coil       | LL1608-FH8N2J       |     |
| L38     | QC0563    | Coil       | LL1608-FH15NJ       |     |
| L39     | QC0562    | Coil       | LL1608-FH12NJ       |     |
| L40     | QH0007    | Coil       | 5CDM 658AN=P3       |     |
| L41     | QC0570    | Coil       | LL1608-FH56NJ       |     |
| L42     | QC0570    | Coil       | LL1608-FH56NJ       |     |
| L43     | QC0558    | Coil       | LL1608-FH5N6S       |     |
| L44     | QC0556    | Coil       | LL1608-FH3N9S       |     |
| L45     | QC0558    | Coil       | LL1608-FH5N6S       |     |
| L46     | QC0561    | Coil       | LL1608-FH10NJ       |     |
| L48     | QC0562    | Coil       | LL1608-FH12NJ       |     |
| L49     | QC0562    | Coil       | LL1608-FH12NJ       |     |
| L50     | QC0562    | Coil       | LL1608-FH12NJ       |     |
| L51     | QC0507    | Coil       | LK16081R0K-T        |     |
| LCD1    | EL0053    | LCD        | WD-S2304I-7TNNA     |     |
| Q1      | XT0135    | Transistor | 2SD2216R-TX         |     |
| Q2      | XT0061    | Transistor | 2SB1132T 100Q       |     |
| Q3      | XE0036    | Transistor | 2SK881-Y(TE85R)     |     |
| Q4      | XU0196    | Transistor | DTC143TE TL         |     |
| Q5      | XE0029    | FET        | 2SK1580-T1          |     |
| Q6      | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q7      | XU0172    | Transistor | XP1501-TX           |     |
| Q8      | XE0029    | FET        | 2SK1580-T1          |     |
| Q9      | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q10     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q11     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q12     | XU0196    | Transistor | DTC143TE TL         |     |
| Q13     | XT0181    | Transistor | 2SC4738-BL (TE85R)  |     |
| Q14     | XT0181    | Transistor | 2SC4738-BL (TE85R)  |     |

| Ref.No. | Parts No. | Descriptin | Parts Name          | Ver |
|---------|-----------|------------|---------------------|-----|
| Q15     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q16     | XU0092    | Transistor | UN911H-TX           |     |
| Q17     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q18     | XU0196    | Transistor | DTC143TE TL         |     |
| Q19     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q20     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q21     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q22     | XT0181    | Transistor | 2SC4738-BL (TE85R)  |     |
| Q23     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q24     | XU0196    | Transistor | DTC143TE TL         |     |
| Q25     | XT0135    | Transistor | 2SD2216R-TX         |     |
| Q26     | XE0019    | FET        | 2SJ144Y TE85R       |     |
| Q27     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q28     | XU0171    | Transistor | XP1111-TX           |     |
| Q29     | XU0171    | Transistor | XP1111-TX           |     |
| Q30     | XU0171    | Transistor | XP1111-TX           |     |
| Q31     | XU0196    | Transistor | DTC143TE TL         |     |
| Q32     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q33     | XU0092    | Transistor | UN911H-TX           |     |
| Q34     | XT0135    | Transistor | 2SD2216R-TX         |     |
| Q35     | XU0196    | Transistor | DTC143TE TL         |     |
| Q36     | XU0196    | Transistor | DTC143TE TL         |     |
| Q37     | XU0196    | Transistor | DTC143TE TL         |     |
| Q38     | XT0180    | Transistor | 2SC5066FT-Y (TE85L) |     |
| Q39     | XU0172    | Transistor | XP1501-TX           |     |
| Q40     | XT0061    | Transistor | 2SB1132T 100Q       |     |
| Q41     | XU0092    | Transistor | UN911H-TX           |     |
| Q42     | XE0029    | FET        | 2SK1580-T1          |     |
| Q43     | XU0092    | Transistor | UN911H-TX           |     |
| Q44     | XU0171    | Transistor | XP1111-TX           |     |
| Q45     | XU0171    | Transistor | XP1111-TX           |     |
| Q46     | XU0171    | Transistor | XP1111-TX           |     |
| Q47     | XU0171    | Transistor | XP1111-TX           |     |
| Q48     | XU0171    | Transistor | XP1111-TX           |     |
| Q49     | XU0196    | Transistor | DTC143TE TL         |     |
| Q50     | XU0092    | Transistor | UN911H-TX           |     |
| Q51     | XU0196    | Transistor | DTC143TE TL         |     |
| Q52     | XU0196    | Transistor | DTC143TE TL         |     |
| Q53     | XE0029    | FET        | 2SK1580-T1          |     |
| Q54     | XT0135    | Transistor | 2SD2216R-TX         |     |
| R1      | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R2      | RK3526    | Chip R.    | ERJ2GEJ101X         |     |
| R3      | RK3521    | Chip R.    | ERJ2GEJ390X         |     |
| R4      | RK3521    | Chip R.    | ERJ2GEJ390X         |     |
| R5      | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R6      | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R7      | RK3526    | Chip R.    | ERJ2GEJ101X         |     |
| R8      | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R9      | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R10     | RK3546    | Chip R.    | ERJ2GEJ472X         |     |
| R11     | RK3514    | Chip R.    | ERJ2GEJ100X         |     |
| R12     | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R13     | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R14     | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R15     | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R16     | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R17     | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R18     | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R19     | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R20     | RK3526    | Chip R.    | ERJ2GEJ101X         |     |
| R21     | RK3562    | Chip R.    | ERJ2GEJ104X         |     |

| Ref.No. | Parts No. | Descriptin | Parts Name  | Ver |
|---------|-----------|------------|-------------|-----|
| R22     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R24     | RK3530    | Chip R.    | ERJ2GEJ221X |     |
| R25     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R26     | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R27     | RK3530    | Chip R.    | ERJ2GEJ221X |     |
| R28     | RK3534    | Chip R.    | ERJ2GEJ471X |     |
| R29     | RK3548    | Chip R.    | ERJ2GEJ682X |     |
| R30     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R31     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R32     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R33     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R34     | RK3557    | Chip R.    | ERJ2GEJ393X |     |
| R35     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R36     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R37     | RK3534    | Chip R.    | ERJ2GEJ471X |     |
| R38     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R39     | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R40     | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R41     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R42     | RK3526    | Chip R.    | ERJ2GEJ101X |     |
| R43     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R44     | RK3540    | Chip R.    | ERJ2GEJ152X |     |
| R45     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R46     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R47     | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R48     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R49     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R50     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R51     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R52     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R53     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R54     | RK3570    | Chip R.    | ERJ2GEJ474X |     |
| R55     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R56     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R57     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R58     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R59     | RK3532    | Chip R.    | ERJ2GEJ331X |     |
| R60     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R61     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R62     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R63     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R64     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R65     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R66     | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R67     | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R68     | RK3526    | Chip R.    | ERJ2GEJ101X |     |
| R69     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R70     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R71     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R72     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R73     | RK3530    | Chip R.    | ERJ2GEJ221X |     |
| R74     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R75     | RK3566    | Chip R.    | ERJ2GEJ224X |     |
| R76     | RK3526    | Chip R.    | ERJ2GEJ101X |     |
| R77     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R78     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R79     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R80     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R81     | RK3566    | Chip R.    | ERJ2GEJ224X |     |
| R82     | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R83     | RK3522    | Chip R.    | ERJ2GEJ470X |     |

| Ref.No. | Parts No. | Descriptin | Parts Name  | Ver |
|---------|-----------|------------|-------------|-----|
| R84     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R85     | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R86     | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R87     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R88     | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R89     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R90     | RK3556    | Chip R.    | ERJ2GEJ333X |     |
| R91     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R92     | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R93     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R94     | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R95     | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R96     | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R97     | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R98     | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R99     | RK3574    | Chip R.    | ERJ2GEJ105X |     |
| R100    | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R101    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R102    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R103    | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R104    | RK3559    | Chip R.    | ERJ2GEJ563X |     |
| R105    | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R106    | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R107    | RK3570    | Chip R.    | ERJ2GEJ474X |     |
| R108    | RK3553    | Chip R.    | ERJ2GEJ183X |     |
| R109    | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R110    | RK3566    | Chip R.    | ERJ2GEJ224X |     |
| R111    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R112    | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R113    | RK3546    | Chip R.    | ERJ2GEJ472X |     |
| R114    | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R115    | RK3501    | Chip R.    | ERJ2GE0R00X |     |
| R116    | RK3522    | Chip R.    | ERJ2GEJ470X |     |
| R117    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R118    | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R119    | RK3552    | Chip R.    | ERJ2GEJ153X |     |
| R120    | RK3526    | Chip R.    | ERJ2GEJ101X |     |
| R121    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R122    | RK3559    | Chip R.    | ERJ2GEJ563X |     |
| R123    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R124    | RK3558    | Chip R.    | ERJ2GEJ473X |     |
| R125    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R126    | RK3568    | Chip R.    | ERJ2GEJ334X |     |
| R127    | RK3553    | Chip R.    | ERJ2GEJ183X |     |
| R128    | RK3534    | Chip R.    | ERJ2GEJ471X |     |
| R129    | RK3542    | Chip R.    | ERJ2GEJ222X |     |
| R130    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R131    | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R132    | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R133    | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R134    | RK3548    | Chip R.    | ERJ2GEJ682X |     |
| R135    | RK3526    | Chip R.    | ERJ2GEJ101X |     |
| R136    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R137    | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R138    | RK3554    | Chip R.    | ERJ2GEJ223X |     |
| R139    | RK3538    | Chip R.    | ERJ2GEJ102X |     |
| R140    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R141    | RK3562    | Chip R.    | ERJ2GEJ104X |     |
| R142    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R143    | RK3550    | Chip R.    | ERJ2GEJ103X |     |
| R144    | RK3550    | Chip R.    | ERJ2GEJ103X |     |

| Ref.No. | Parts No. | Descriptin | Parts Name          | Ver |
|---------|-----------|------------|---------------------|-----|
| R145    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R146    | RK3574    | Chip R.    | ERJ2GEJ105X         |     |
| R147    | RK3554    | Chip R.    | ERJ2GEJ223X         |     |
| R148    | RK3562    | Chip R.    | ERJ2GEJ104X         |     |
| R149    | RK3552    | Chip R.    | ERJ2GEJ153X         |     |
| R150    | RK3566    | Chip R.    | ERJ2GEJ224X         |     |
| R151    | RK3570    | Chip R.    | ERJ2GEJ474X         |     |
| R152    | RK3538    | Chip R.    | ERJ2GEJ102X         |     |
| R153    | RA0009    | Chip R.    | EXBV8V102JV         |     |
| R154    | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R155    | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R156    | RK3534    | Chip R.    | ERJ2GEJ471X         |     |
| R157    | RK3552    | Chip R.    | ERJ2GEJ153X         |     |
| R158    | RK3548    | Chip R.    | ERJ2GEJ682X         |     |
| R159    | RK3562    | Chip R.    | ERJ2GEJ104X         |     |
| R160    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R161    | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R162    | RK3552    | Chip R.    | ERJ2GEJ153X         |     |
| R163    | RK3556    | Chip R.    | ERJ2GEJ333X         |     |
| R164    | RK3557    | Chip R.    | ERJ2GEJ393X         |     |
| R165    | RK3555    | Chip R.    | ERJ2GEJ273X         |     |
| R166    | RK3557    | Chip R.    | ERJ2GEJ393X         |     |
| R167    | RK3546    | Chip R.    | ERJ2GEJ472X         |     |
| R168    | RK3542    | Chip R.    | ERJ2GEJ222X         |     |
| R169    | RK3566    | Chip R.    | ERJ2GEJ224X         |     |
| R170    | RK3568    | Chip R.    | ERJ2GEJ334X         |     |
| R171    | RK3538    | Chip R.    | ERJ2GEJ102X         |     |
| R172    | RK3568    | Chip R.    | ERJ2GEJ334X         |     |
| R173    | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R174    | RK3568    | Chip R.    | ERJ2GEJ334X         |     |
| R175    | RK3574    | Chip R.    | ERJ2GEJ105X         |     |
| R176    | RK3528    | Chip R.    | ERJ2GEJ151X         |     |
| R177    | RK3522    | Chip R.    | ERJ2GEJ470X         |     |
| R178    | RK3540    | Chip R.    | ERJ2GEJ152X         |     |
| R179    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R180    | RK3001    | Chip R.    | MCR03EZHJ000        |     |
| R181    | RK3540    | Chip R.    | ERJ2GEJ152X         |     |
| R182    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R183    | RK3528    | Chip R.    | ERJ2GEJ151X         |     |
| R184    | RK3528    | Chip R.    | ERJ2GEJ151X         |     |
| R185    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R186    | RK3550    | Chip R.    | ERJ2GEJ103X         |     |
| R187    | RK3562    | Chip R.    | ERJ2GEJ104X         |     |
| R188    | RK3543    | Chip R.    | ERJ2GEJ272X         |     |
| R189    | RK3556    | Chip R.    | ERJ2GEJ333X         |     |
| R190    | RK3558    | Chip R.    | ERJ2GEJ473X         |     |
| R191    | RK3501    | Chip R.    | ERJ2GE0R00X         |     |
| R192    | RK3528    | Chip R.    | ERJ2GEJ151X         |     |
| R193    | RK3562    | Chip R.    | ERJ2GEJ104X         |     |
| R196    | RK0105    | Chip R.    | ERJ6GEYJ2R2V        |     |
| R198    | RK3034    | Chip R.    | MCR03EZHJ471        |     |
| R200    | RK3538    | Chip R.    | ERJ2GEJ102X         |     |
| R201    | RK3574    | Chip R.    | ERJ2GEJ105X         |     |
| R203    | RK3568    | Chip R.    | ERJ2GEJ334X         |     |
| RE1     | UR0023    | Chip R.    | TP70N00AE20         |     |
| TC1     | CT0045    | Trimmer    | SMD3-010C1          |     |
| VR1     | RH0142    | Volume     | MVR22HXBRN103       |     |
| X1      | XQ0140    | Crystal    | SX-2112             |     |
| X2      | XQ0132    | Crystal    | CSA-309 4.194304MHZ |     |
| XF1     | XF0047    | Filter     | RE63SM113 38.850MHZ |     |
|         | TS0168    |            | VCO CASE B          |     |

| Ref.No. | Parts No. | Descriptin | Parts Name       | Ver |
|---------|-----------|------------|------------------|-----|
|         | TS0167    | PCB        | VCO CASE A       | 0.5 |
|         | UP0426    |            | DJX3 INTEGRATED  |     |
|         | TL0027    |            | REFLECTIVE SHEET |     |
|         | TL0026    |            | DIFFUSION SHEET  |     |
|         | ST0069    |            | LCD HOLDER       |     |
|         | DG0040    |            | LCD LIGHT        |     |

## SW Unit

| Ref.No. | Parts No. | Descriptin | Parts Name    | Ver |
|---------|-----------|------------|---------------|-----|
| SW301   | UU0027    | Switch     | SKQGAA        |     |
| SW302   | UU0027    | Switch     | SKQGAA        |     |
| W301    | MGCL02AA  | Wire       | #30G02-020-02 |     |
| W302    | MRCL02GG  | Wire       | #30RH1-020-H1 |     |
| W303    | MBCL02GG  | Wire       | #30BH1-020-H1 |     |

| Ref.No. | Parts No. | Descriptin | Parts Name        | Ver |
|---------|-----------|------------|-------------------|-----|
|         | PH0009A   |            | Warranty          | T   |
|         | DS0446    |            | Spec.sheet        | 2.1 |
|         | PR0478    |            | Serial seal       |     |
|         | PR0452    |            | FCC homeuse label | T   |
|         | PR0447    |            | FCC warning label | T   |
|         | HK0538    |            | Pacage            |     |
|         | HU0175    |            | Inner DJ-S40Z     |     |
|         | HU0176    |            | 10 Inner DJ-S40Z  |     |
|         | HM0201    |            | Carton            | T   |
|         | HP0006Z   |            | Protection bag    |     |
|         | PR0513    |            | Label N-13×13     |     |
|         | PR0514    |            | Label E-10×49     | 2   |
|         | #G1024    |            | Belt clip unit    |     |

## Mechanical Parts

| Ref.No. | Parts No. | Descriptin | Parts Name           | Ver |
|---------|-----------|------------|----------------------|-----|
| W1      | MRCL03AA  | Wire       | #30R02-030-02        | 2   |
| W2      | MBCLH4GG  | Wire       | #30BH1-045-H1        |     |
| W3      | MACK02GG  | Wire       | #28AH1-020-H1        |     |
|         | FG0337    |            | DC CAP               |     |
|         | ES0021    |            | T032S23A0000         |     |
|         | FG0331    |            | TERMINAL RUBBER      |     |
|         | AN0012    |            | RND N7X0.75 BR/B.ZN  |     |
|         | FP0179    |            | REAR PANEL           |     |
|         | FG0334    |            | SP CAP               |     |
|         | FG0335    |            | JACK RUBBER          |     |
|         | FG0338    |            | FUNC RUBBER          |     |
|         | YX0032    |            | LCDTAPE              |     |
|         | AN0027    |            | ANTENNA NUT XH720    |     |
|         | KZ0137    |            | REAR CASE            |     |
|         | FG0330    |            | KEY RUBBER           |     |
|         | TS0166    |            | RF SHIERD            |     |
|         | SD0093    |            | TERMINAL R           |     |
|         | SD0092    |            | TERMINAL L           |     |
|         | NK0078    |            | VOL NOB X3           |     |
|         | DP0139    |            | LCD PANEL            |     |
|         | KZ0136    |            | FRONT CASE           | 2   |
|         | AX0005    |            | OPH P 1.7+5.5 FE NI3 |     |
|         | FG0347    |            | ANTENNA cushion      | 2   |
|         | EA0096    |            | ANTENNA EA96         |     |
|         | FM0201    |            | ANTENNA EARTH        | 2   |
|         | AX0008    |            | OPH P 1.7+4 FEBC3    |     |
|         | FG0346    |            | Cushion A            | 2   |
|         | FP0182    |            | SP cushion           |     |
|         | SP0013    |            | LECTRA #7800         | 2   |
|         | UE0338    |            | SMA 19-16-3TGG       |     |
|         | AF0025    |            | OPH M2+2.5 FE/N1     | 2   |

## Packing

| Ref.No. | Parts No. | Descriptin | Parts Name         | Ver |
|---------|-----------|------------|--------------------|-----|
|         | EA0081    |            | Antenna            |     |
|         | PS0384    |            | Instruction Manual |     |

# ADJUSTMENT

## 1) How to enter the adjustment mode

Press the key like the below after Key Lock.

BANK > SCAN > V/P/M > BANK > V/P/M > SCAN

## 2) Adjustment

| Display | Memory Content                            | Adjust point |
|---------|---|--------------|
| FrEq    | Frequency Adjustment                      | TC1          |
| FrEq    | Maximum AF output level Adjustment        | L40          |
| PLt-F   | Stereo Adjustment                         | VR1          |
| 1n1     | BP1 Squelch level 1 Setting               | SCAN key     |
| 1nF     | BP1 Squelch level 5 Setting               | SCAN key     |
| 2n1     | BP2 Squelch level 1 Setting               | SCAN key     |
| 2nF     | BP2 Squelch level 5 Setting               | SCAN key     |
| 3n1     | BP3 Squelch level 1 Setting               | SCAN key     |
| 3nF     | BP3 Squelch level 5 Setting               | SCAN key     |
| 4n1     | BP4 Squelch level 1 Setting               | SCAN key     |
| 4nF     | BP4 Squelch level 5 Setting               | SCAN key     |
| 5n1     | BP5 Squelch level 1 Setting               | SCAN key     |
| 5nF     | BP5 Squelch level 5 Setting               | SCAN key     |
| 6n1     | BP6 Squelch level 1 Setting               | SCAN key     |
| 6nF     | BP6 Squelch level 5 Setting               | SCAN key     |
| 3S1     | BP3 S meter level 1 Setting               | SCAN key     |
| 3SF     | BP3 S meter level 5 Setting               | SCAN key     |
| Wn1     | WFM Squelch level 1 Setting               | SCAN key     |
| WnF     | WFM Squelch level 5 Setting               | SCAN key     |
| ws1     | WFM S meter level 1 Setting               | SCAN key     |
| wsF     | WFM S meter level 5 Setting               | SCAN key     |
| dSPv    | Reduction Battery Display Setting         | SCAN key     |
| bUGvoL  | Wiretapping Detector Sound Volume Setting | SCAN key     |

When want to change the display, press the V/P/M key or BANK key.

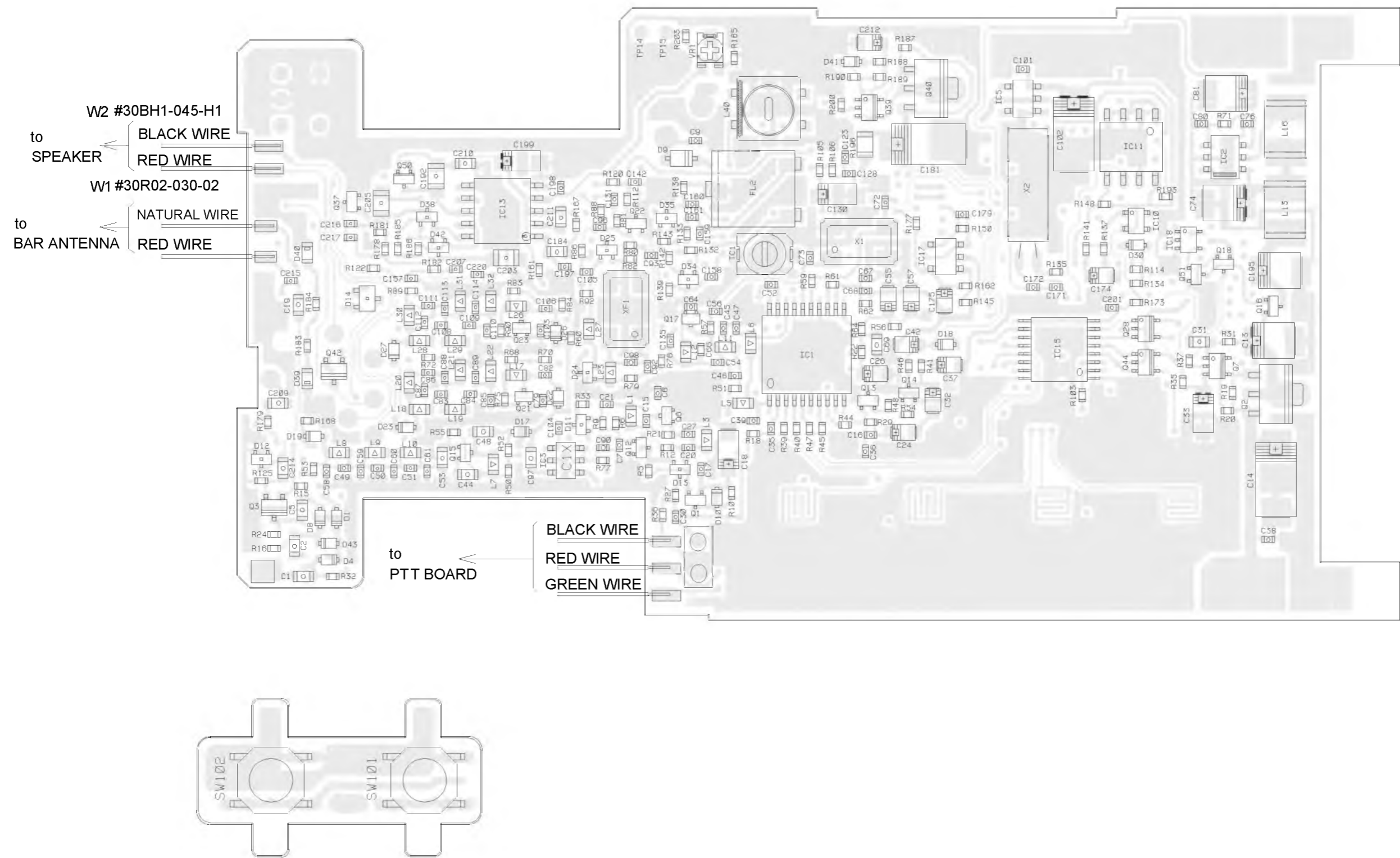
| Item                           | Adjustment Content  | Specification         |
|--------------------------------|---|-----------------------|
| Reference Frequency Adjustment | Adjust the TC1 to 391.05MHz.<br>Display : FrE9 Adjust Point : TC1<br>Check Point : TP2  | 391.05MHz<br>+ -100Hz |
| AF output Adjustment           | AF maximum output Display : FrEq<br>Input the 142.6MHz of 30dBu to the test unit which modulation is 1KHz 3.5KHz and adjust the L40 to become maximum AF level.<br><br>Adjust Point : L40 (A side of main board)  | More than<br>20mw(8Ω) |
| Stereo Adjustment              | Pilot Frequency Adjustment Display:pLt-F<br>Input the 90.5MHz of 30dBu (no modulation) and adjust the VR1 to 76KHz of the Pilot Frequency. (Connect the Ear-phone plug when adjust this item.)<br><br>Adjust Point : VR1 Check Point : TP15   | 76KHz<br>+ -1KHz      |
| SQL Adjustment ( BP1 )         | SQL level 1 Adjustment Display : 1n1<br>Input the 14.3MHz of -8dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound, when press the SCAN key.<br><br>SQL level 5 Adjustment Display : 1nF<br>Input the 14.3MHz of -2dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound, when press the SCAN key.      |                       |
| SQL Adjustment ( BP2 )         | SQL level 1 Adjustment Display : 2n1<br>Input the 109.15MHz of -10dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound, when press the SCAN key.<br><br>SQL level 5 Adjustment Display : 2nF<br>Input the 109.15MHz of -4dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound, when press the SCAN key. |                       |
| SQL Adjustment ( BP3 )         | SQL level 1 Adjustment Display : 3n1<br>Input the 145.13MHz of -8dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound.<br><br>SQL level 5 Adjustment Display : 3nF<br>Input the 145.13MHz of -2dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound.  |                       |
| SQL Adjustment ( BP4 )         | SQL level 1 Adjustment Display : 4n1<br>Input the 290.15MHz of -8dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound.<br><br>SQL level 5 Adjustment Display : 4nF<br>Input the 290.15MHz of -2dBu (standard modulation), and press the SCAN key.<br>Check if can hear the BEEP sound.  |                       |



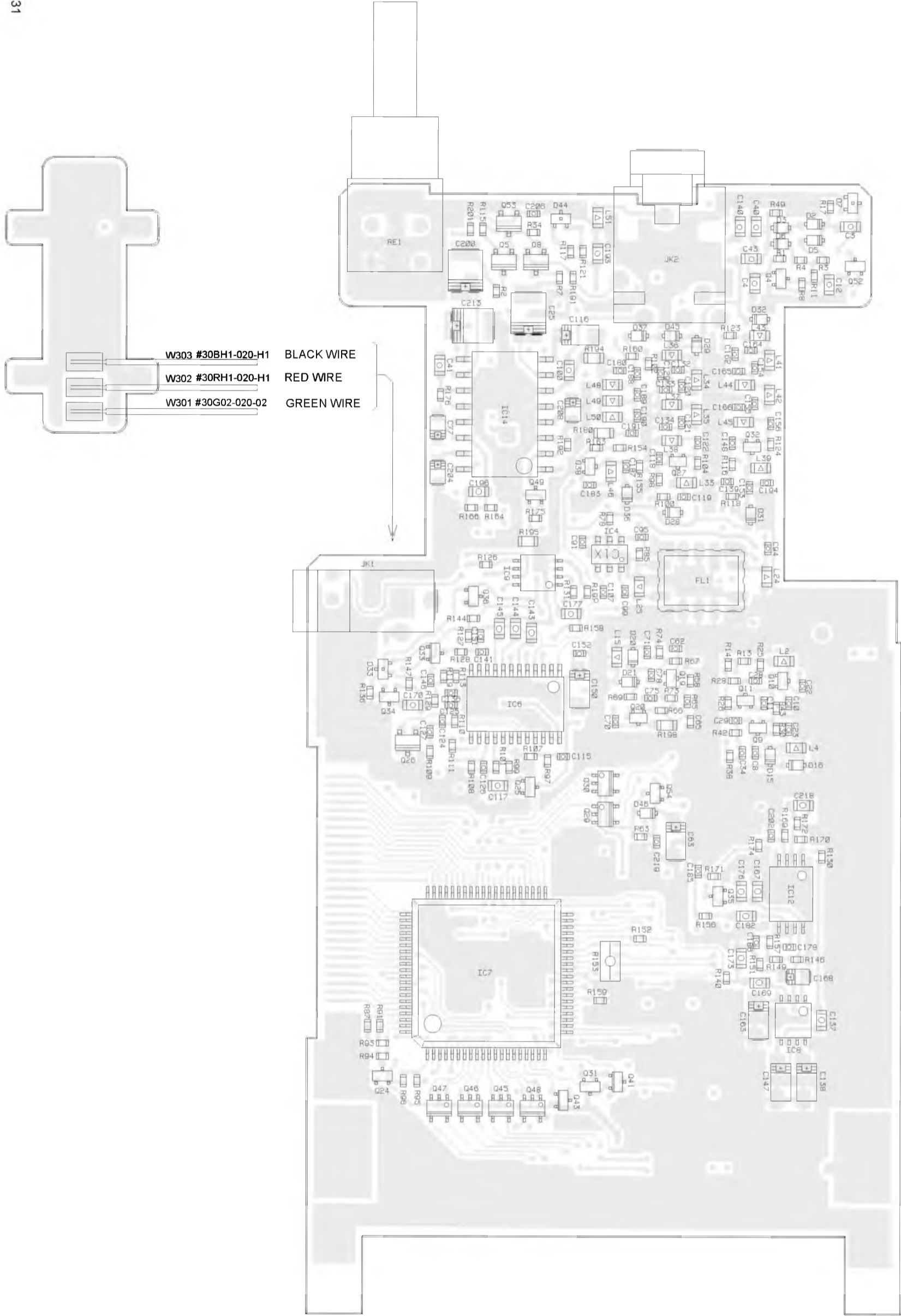


PC BOARD VIEW

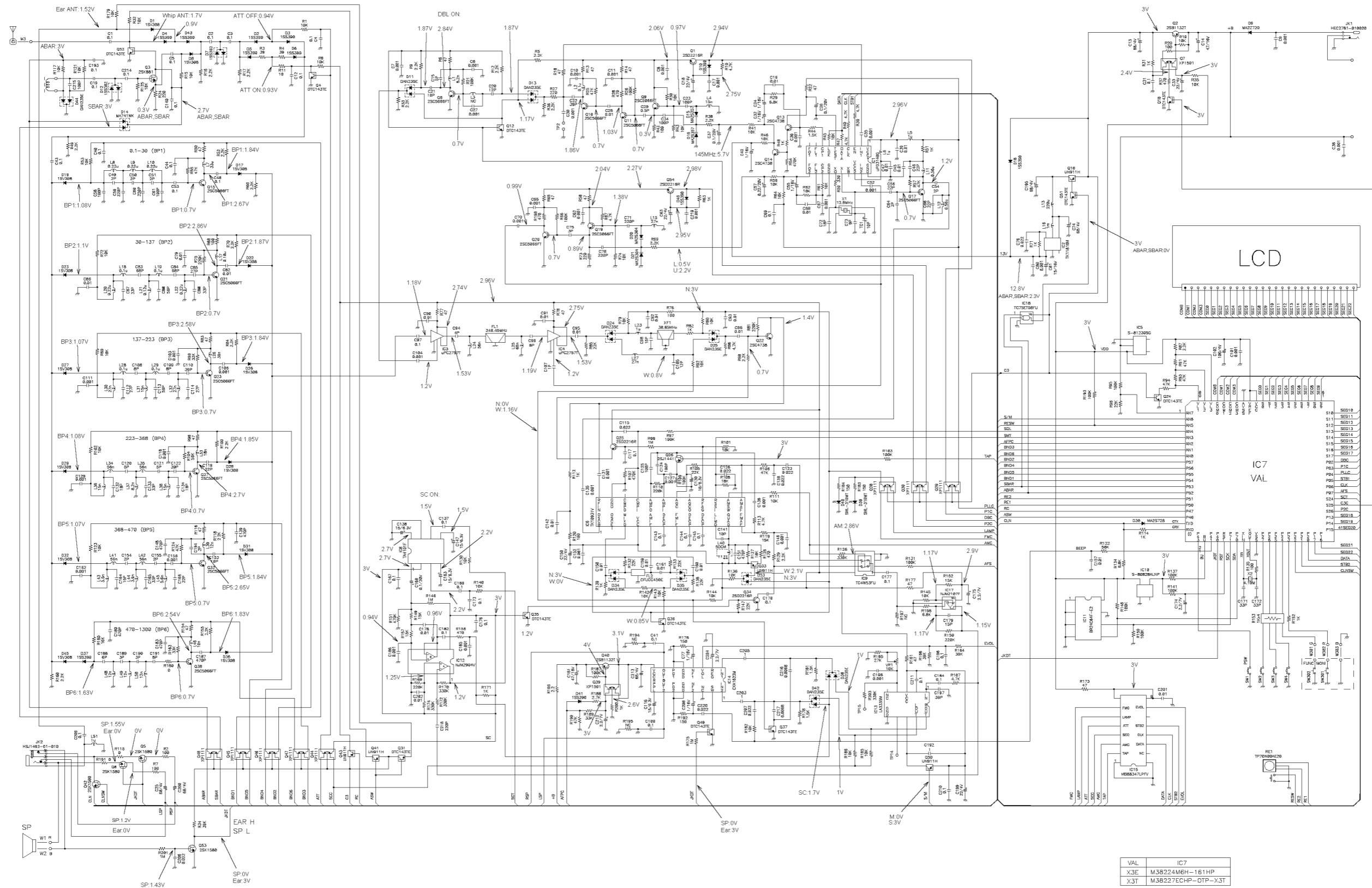
1) DJ-X3T /X3E Side A



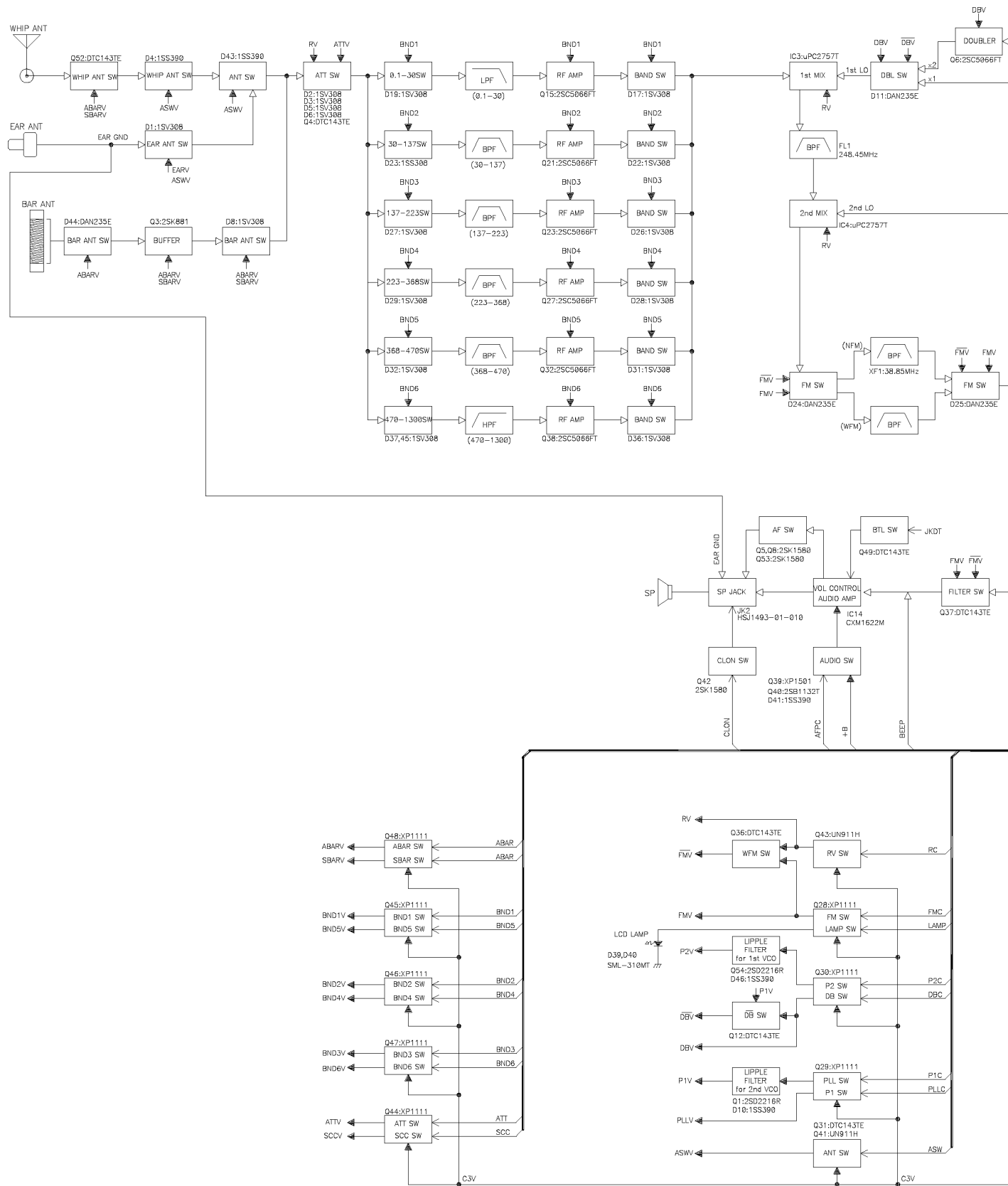
2) DJ-X3T /X3E Side B



## SCHEMATIC DIAGRAM



# BLOCK DIAGRAM





# ALINCO, INC.

**Head Office :** Shin-Dai Building 9th Floor  
2-6, 1-Chome, Dojimahama, Kita-ku, Osaka 530-0004, Japan  
Phone: +81-6-4797-2136 Fax: +81-6-4797-2157  
E-mail: [export@alinco.co.jp](mailto:export@alinco.co.jp)

Dealer/Distributor